Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C01E-01-SF Great Wicomico River

Location: Described in VDH Notice and Description of Shellfish Condemnation 89A, 5/28/1997

City / County: Northumberland Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 4A

Portion of VDH-DSS Shellfish Condemnation Notice 013-089A, 6/23/2006.

The upstream portion of the Great Wicomico River was included on the 1998 303(d) list due to VDH Shellfish Condemnation 89A, 5/28/1997. Although the condemnation is currently larger than the 1998 condemnation, the bacteria TMDL only addressed the original upstream portion, which is now considered Category 4A. The TMDL was approved by EPA on 6/8/2006. As the segment first expanded in the 2004 cycle, the TMDL will be due in 2016 (see C01E-01-SF2).

Great Wicomico River

Shellfishing

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.424

Sources:

Non-Point Source

Final 2008 Page 1641 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C01E-01-SF2 Great Wicomico River

Location: Portion of VDH Notice and Description of Shellfish Condemnation Number 013-089A, 6/23/2006 not included in the

5/28/1997 condemnation.

City / County: Northumberland Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

Portion of VDH-DSS Shellfish Condemnation Notice 013-089A, 6/23/2006.

The upstream portion of the Great Wicomico River was included on the 1998 303(d) list due to VDH Shellfish Condemnation 89A, 5/28/1997. Although the condemnation is currently larger than the 1998 condemnation, the bacteria TMDL only addressed the original upstream portion, which is now considered Category 4A. The TMDL was approved by EPA on 6/8/2006. As the segment first expanded in the 2004 cycle, the TMDL will be due in 2016.

Great Wicomico River

Shellfishing

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.637

Sources:

Non-Point Source

Final 2008 Page 1642 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C01E-02-SF Balls Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation Number 89B, 5/28/1997

City / County: Northumberland Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 4A

Portion of VDH-DSS Shellfish Condemnation Notice 013-089H, 6/23/2006.

The upstream portion of Balls Creek was included on the 1998 303(d) list due to VDH Shellfish Condemnation 89C, 5/28/1997. Although the condemnation is currently larger than the 1998 condemnation, the bacteria TMDL only addressed the original upstream portion, which is now considered Category 4A. The expansion is addressed in fact sheet C01E-02-SF2.

Balls Creek

Shellfishing

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.064

Sources:

Non-Point Source

Final 2008 Page 1643 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C01E-02-SF2 Balls Creek

Location: Portion of VDH Notice and Description of Shellfish Condemnation Number 013-089H, 6/23/2006 not included in the

5/28/1997 condemnation.

City / County: Northumberland Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

Portion of VDH-DSS Shellfish Condemnation Notice 013-089H, 6/23/2006.

The upstream portion of Balls Creek was included on the 1998 303(d) list due to VDH Shellfish Condemnation 89C, 5/28/1997. Although the condemnation is currently larger than the 1998 condemnation, the bacteria TMDL only addressed the original upstream portion, which is now considered Category 4A. As the segment first expanded in the 2002 cycle, the TMDL will be due in 2014.

Balls Creek
Shellfishing
Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.128

Sources:

Non-Point Source

Final 2008 Page 1644 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C01E-03-SF Tipers Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation Number 89C, 5/28/1997

City / County: Northumberland Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 4A

Portion of VDH-DSS Shellfish Condemnation Notice 013-089G, 6/23/2006.

The upstream portion of Tipers Creek was included on the 1998 303(d) list due to VDH Shellfish Condemnation 89C, 5/28/1997. Although the condemnation is currently larger than the 1998 condemnation, the bacteria TMDL only addressed the original upstream portion, which is now considered Category 4A. The lower portion is addressed in fact sheet C01E-03-SF2.

Tipers Creek

Shellfishing

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.077

Sources:

Non-Point Source

Final 2008 Page 1645 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C01E-03-SF2 Tipers Creek

Location: Portion of VDH Notice and Description of Shellfish Condemnation Number 013-089G, 6/23/2006 not included in the

5/28/1997 condemnation.

City / County: Northumberland Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

Portion of VDH-DSS Shellfish Condemnation Notice 013-089G, 6/23/2006.

The upstream portion of Tipers Creek was included on the 1998 303(d) list due to VDH Shellfish Condemnation 89C, 5/28/1997. Although the condemnation is currently larger than the 1998 condemnation, the bacteria TMDL only addressed the original upstream portion, which is now considered Category 4A. The lower portion is addressed in fact sheet C01E-03-SF2. As the segment first expanded in the 2002 cycle, the TMDL will be due in 2014.

Area reduced in the 2008 cycle.

Tipers Creek

Shellfishing

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.054

Sources:

Non-Point Source

Final 2008 Page 1646 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C01E-04-SF Barrett Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation Number 013-089E, 6/23/2006

City / County: Northumberland Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH-DSS Shellfish Condemnation Notice 013-089E, 6/23/2006

Area expanded during the 2008 cycle.

Barrett Creek

Estuary Reservoir River

Shellfishing (Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.109

Sources:

Source Unknown

Final 2008 Page 1647 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C01E-05-SF Whays Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation Number 089, 5/28/1997

City / County: Northumberland Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 4A

Portion of VDH-DSS Shellfish Condemnation Notice 013-220B, 6/23/2006

The upstream portion of Whays Creek was included on the 1998 303(d) list as impaired of the Shellfish Consumption Use due to VDH Condemnation 89F, 5/28/1997. Although the condemnation has since expanded, the shellfish TMDL, which was approved by EPA on 6/8/2006, only addressed the original upstream impairment. The upstream segment will be considered Category 4A; the lower portion is addressed in fact sheet C01E-05-SF2.

Whays Creek
Shellfishing
Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.042

Sources:

Non-Point Source

Final 2008 Page 1648 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C01E-05-SF2 Whays Creek

Location: Portion of VDH Notice and Description of Shellfish Condemnation Number 013-220B, 6/23/2006 not included in

condemnation 89F, 5/28/1997.

City / County: Northumberland Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

Portion of VDH-DSS Shellfish Condemnation Notice 013-220B, 6/23/2006

The upstream portion of Whays Creek was included on the 1998 303(d) list as impaired of the Shellfish Consumption Use due to VDH Condemnation 89F, 5/28/1997. Although the condemnation has since expanded, the shellfish TMDL, which was approved by EPA on 6/8/2006, only addressed the original upstream impairment. The upstream segment will be considered Category 4A; the TMDL for the lower portion will be due in 2018.

Whays Creek

Estuary Reservoir River

Shellfishing (Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.098

Sources:

Non-Point Source

Final 2008 Page 1649 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C01E-06-SF Warehouse Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation Number 089E, 5/28/1997

City / County: Northumberland Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 4A

Portion of VDH-DSS Shellfish Condemnation Notice 013-220A, 6/23/2006

The upper portion of Warehouse Creek was included on the 1998 303(d) list due to VDH Condemnation 89E, 5/28/1997. Although the condemnation has since expanded, the bacteria TMDL was completed only for the original upstream portion. The TMDL was approved by EPA on 6/8/2006. The upper portion will be considered Category 4A. The lower portion is addressed in fact sheet C01E-06-SF2.

Warehouse Creek
Shellfishing
Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.069

Sources:

Non-Point Source

Final 2008 Page 1650 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C01E-06-SF2 Warehouse Creek

Location: Portion of VDH Notice and Description of Shellfish Condemnation Number 013-220A, 6/23/2006 not included in

condemnation 89E, 5/28/1997.

City / County: Northumberland Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

Portion of VDH-DSS Shellfish Condemnation Notice 013-220A, 6/23/2006

The upper portion of Warehouse Creek was included on the 1998 303(d) list due to VDH Condemnation 89E, 5/28/1997. Although the condemnation has since expanded, the bacteria TMDL was completed only for the original upstream portion. The TMDL was approved by EPA on 6/8/2006. The TMDL will be due in 2018 since it first expanded in the 2006 cycle.

Warehouse Creek
Shellfishing
Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.021

Sources:

Non-Point Source

Final 2008 Page 1651 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C01E-07-SF Horn Harbor

Location: Described in VDH Notice and Description of Shellfish Condemnation 013-089D, 6/23/2006.

City / County: Northumberland Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH-DSS Shellfish Condemnation 013-089D, 6/23/2006

Area expanded in the 2006 cycle.

Horn Harbor Estuary Reservoir River
Shellfishing (Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.069

Sources:

Source Unknown

Final 2008 Page 1652 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C01E-08-BAC Cockrell Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation Number 012-002A, 9/22/2005.

City / County: Northumberland Co.

Use(s): Recreation

Cause(s) /

VA Category: Enterococcus / 5A

The bacteria TMDL for shellfish impairments in Cockrell Creek is currently under development. Due to monitoring around the facility, the segment is now listed for the Recreation Use due to enterococci violations at several stations during the 2008 cycle. The enterococci TMDL is due in 2020, however it will be addressed during development of the shellfish TMDL.

Cockrell Creek

Estuary Reservoir River

(Sq. Miles) (Acres) (Miles)

Enterococcus - Total Impaired Size by Water Type: 0.464

Sources:

Industrial Point Source

Discharge

Non-Point Source

Final 2008 Page 1653 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C01E-08-SF Cockrell Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation Number 012-002A, 9/22/2005.

City / County: Northumberland Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH-DSS Shellfish Condemnation Notice 012-002A, 9/22/2005. Area increased in 2008 cycle.

The bacteria TMDL for shellfish impairments in Cockrell Creek is currently under development.

Cockrell Creek

Shellfishing

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.464

Sources:

Industrial Point Source

int Source Non-Point Source

Discharge

Final 2008 Page 1654 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C01E-09-SF Prentice Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation Number 015-022I, 5/2/2006.

City / County: Northumberland Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 4A

VDH-DSS Shellfish Condemnation Notice 015-022I, 5/2/2006

This portion of Prentice Creek was included on the 1998 303(d) list due to condemnation 22, 2/27/1997. Although the segment has changed sizes several time, it currently matches the 1998 impairment.

The bacteria TMDL for this shellfish impairment was completed during the 2008 cycle as part of the Dividing Creek and Prentice Creek Bacteria TMDL report. The TMDL was approved by EPA on 6/8/2006; the segment will be considered Category 4A for the Shellfish Use.

Prentice Creek

Shellfishing

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.015

Sources:

Non-Point Source

Final 2008 Page 1655 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C01E-10-SF Owens Pond

Location: Described in VDH Notice and Description of Shellfish Condemnation Number 011-122, 3/9/2005

City / County: Northumberland Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH-DSS Shellfish Condemnation 011-122, 3/9/2005

Owens Pond Estuary Reservoir River
Shellfishing (Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.187

Sources:

Source Unknown

Final 2008 Page 1656 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C01E-11-SF Little Taskmakers Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation Number 011-190A 1/27/2006

City / County: Northumberland Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH Shellfish Condemnation 011-190A, 1/27/2006

Little Taskmakers Creek

Estuary Reservoir River

Shellfishing (Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.040

Sources:

Source Unknown

Final 2008 Page 1657 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C01E-12-SF Mill Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation Number 123, 6/2/1997

City / County: Northumberland Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 4A

Portion of VDH-DSS Shellfish Condemnation Notice 014-123B, 5/15/2006.

The upper portion of Mill Creek was included on the 1998 303(d) list due to shellfish condemnation 123, 6/2/1997. The segment was expanded since then, however only the original portion was included in the TMDL for Mill Creek, which was completed during the 2008 cycle and was approved by EPA on 8/22/2007. The original upstream segment is considered Category 4A; the fact sheet for the downstream portion is C01E-12-SF2.

Mill Creek
Shellfishing

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.238

Sources:

Non-Point Source

Final 2008 Page 1658 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C01E-12-SF2 Mill Creek

Location: Portion of VDH Notice and Description of Shellfish Condemnation Number 014-123B, 5/15/2006 not included in the 6/2/1997

condemnation.

City / County: Northumberland Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

Portion of VDH-DSS Shellfish Condemnation Notice 014-123B, 5/15/2006.

The upper portion of Mill Creek was included on the 1998 303(d) list due to shellfish condemnation 123, 6/2/1997. The segment has since expanded, however only the original portion was included in the TMDL for Mill Creek, which was completed during the 2008 cycle and was approved by EPA on 8/22/2007. As the segment first expanded during the 2004 cycle, the TMDL will be due in 2016.

Mill Creek

Shellfishing

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.239

Sources:

Source Unknown

Final 2008 Page 1659 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C01E-13-SF Cloverdale Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation Number 014-124A, 5/15/2006

City / County: Northumberland Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 4A

VDH-DSS Shellfish Condemnation 014-124A, 5/15/2006

The TMDL for Cloverdale Creek was completed during the 2008 cycle and was approved by EPA on 8/22/2007. The segment is considered Category 4A.

Cloverdale Creek

Shellfishing

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.021

Sources:

Non-Point Source

Final 2008 Page 1660 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C01E-15-SF Dividing Creek, Lawrence Creek, Natty Pont Cove

Location: Described in VDH Notices and Description of Shellfish Condemnation Numbers 22A, 2/27/1997

City / County: Northumberland Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 4A

VDH-DSS Shellfish Condemnation Notice 015-22 B, -C, -D, -E, and -F, 5/2/2006.

The upstream section of Dividing Creek was included on the 1998 303(d) list for the Shellfish Use due to VDH condemnation 22A, 2/27/1997. Although the condemnation shrunk and split into separate sections throughout current listing cycles, the bacterial TMDL was completed for the entire 1998 impairment. The currently impaired areas will be considered Category 4A.

Dividing Creek, Lawrence Creek, Natty Pont Cove **Shellfishing**

Estuary (Sq. Miles)

Reservoir (Acres)

River (Miles)

Fecal Coliform - Total Impaired Size by Water Type:

0.231

Sources:

Non-Point Source

Final 2008 Page 1661 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C01E-17-PCB **Chesapeake Bay and Tidal Tributaries**

Location: Chesapeake Bay mainstem and its small coastal tidal tributaries

City / County: Accomack Co. Mathews Co. Chesapeake Bay - Cor Gloucester Co. Lancaster Co.

> Norfolk City Middlesex Co. Northampton Co. Northumberland Co. Poquoson City City

York Co. Virginia Beach City

Use(s): Fish Consumption

Cause(s) /

VA Category: PCB in Fish Tissue / 5A

The Chesapeake Bay and its tidal tributaries are included under the 12/13/2004 VDH Fish Consumption Advisories for PCBs. No more than 2 meals/month are recommended of anadromous (coastal) striped bass.

The advisory was based on the results of DEQ's fish tissue monitoring program, which showed elevated PCBs levels in several monitoring sites within the basin, including:

2 sp at 7-GWR007.97 in the Great Wicomico River 1 sp. At 7-COC000.40 in Cockrell Creek

Also, VDH issued an additional separate fish consumption advisory on 12/13/2004 for PCBs in the Mobjack Bay and its tributaries, particularly the East, West, and Ware Rivers. No more than two meals/month of gizzard shad are recommended.

Chesapeake Bay and Tidal Tributaries

Estuary Reservoir (Acres)

Fish Consumption

(Sq. Miles)

River (Miles)

PCB in Fish Tissue - Total Impaired Size by Water Type: 1,857.071

Sources:

Source Unknown

Final 2008 Page 1662 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C01E-18-SF Unnamed Cove of Dividing Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation Number 015-022G, 5/2/2006

City / County: Northumberland Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 4A

VDH-DSS Shellfish Condemnation Notice 015-022G, 5/2/2006

The cove was included on the 1998 303(d) list as impaired for the Shellfish Use due to condemnation 22B, 2/27/1997. The bacteria TMDL was completed during the 2008 cycle and was approved by EPA on 6/8/2006. The cove will be considered Category 4A for the Shellfish Use.

Unnamed Cove of Dividing Creek

Shellfishing

(Sq. Miles)

Estuary

Reservoir

(Acres)

River

(Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.013

Sources:

Non-Point Source

Final 2008 Page 1663 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C01E-19-SF Prentice Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation Number 015-022H, 5/2/2006

City / County: Northumberland Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 4A

VDH-DSS Shellfish Condemnation Notice 015-022H, 5/2/2006

A portion of Prentice Creek was included on the 1998 303(d) list as impaired for the Shellfish Use due to condemnation 2C, 2/27/1997. Although the Prentice Creek condemnation was shortened in the 2002 cycle, the bacteria TMDL was completed for the entire 1998 portion; the TMDL was approved by EPA on 6/8/2006. This portion is currently impaired and will be considered Category 4A for the Shellfish Use.

Prentice Creek

Shellfishing

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.009

Sources:

Non-Point Source

Final 2008 Page 1664 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C01E-20-SF Lees Cove

Location: Described in VDH Notice and Description of Shellfish Condemnation Number 016-024C, 12/13/2006.

City / County: Lancaster Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH-DSS Shellfish Condemnation 016-024C, 12/13/2006

Lees Cove Estuary Reservoir River
Shellfishing (Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: **0.015**

Sources:

Source Unknown

Final 2008 Page 1665 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C01E-21-SF Chesapeake Bay, UT

Location: Described in VDH Notice and Description of Shellfish Condemnation Number 011-190B, 1/27/2006

City / County: Northumberland Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH-DSS Shellfish Condemnation 011-190B, 1/27/2006

Chesapeake Bay, UT Estuary Reservoir River
Shellfishing (Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.019

Sources:

Source Unknown

Final 2008 Page 1666 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C01E-22-SF Indian Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation Number 016-057A, 12/13/2006

City / County: Lancaster Co. Northumberland Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH-DSS Shellfish Condemnation 016-057A, 12/13/2006

Note: In 1998, the condemnation was smaller and was split in two sections:

57A - Pitmans Cove 57C - Indian Creek

The segments were later merged.

Indian CreekEstuaryReservoirRiverShellfishing(Sq. Miles)(Acres)(Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.412

Sources:

Source Unknown

Final 2008 Page 1667 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C01E-24-SF Dymer Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation Number 016-024A, 12/13/2006

City / County: Lancaster Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH-DSS Shellfish Condemnation Notice 016-024A, 12/13/2006

The upper portion of Dymer Creek was included on the 1998 303(d) list due to VDH condemnation 24A, 3/5/1997. During the 2006 cycle, the condemnation expanded downstream into Chases Cove. However, during the 2008 cycle, the condemnations shrank and split into two separate condemnations - 016-024A Dymer Creek and 016-024F, Chases Cove. The Chases Cove impairment is now addressed in fact sheet C01E-48-SF.

Dymer Creek
Shellfishing
Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.177

Sources:

Source Unknown

Final 2008 Page 1668 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C01E-25-SF Georges Cove

Location: Described in VDH Notice and Description of Shellfish Condemnation Number 016-024E, 12/13/2006

City / County: Lancaster Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH-DSS Shellfish Condemnation 016-024E, 12/13/2006

The area expanded in the 2006 cycle.

Georges Cove Estuary Reservoir River
Shellfishing (Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.034

Sources:

Source Unknown

Final 2008 Page 1669 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C01E-26-SF Johnson Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation Number 016-024D, 12/13/2006

City / County: Lancaster Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH-DSS Shellfish Condemnation Notice 016-024D, 12/13/2006

Condemnation expanded in the 2008 cycle.

Johnson Creek

Estuary Reservoir River

Shellfishing (Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.029

Sources:

Source Unknown

Final 2008 Page 1670 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C01E-27-SF Tabs Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation Number 016-133A, 12/13/2006

City / County: Lancaster Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH-DSS Shellfish Condemnation Notice 016-133A, 12/13/2006

Size increased during the 2008 cycle.

Tabs Creek Estuary Reservoir River
Shellfishing (Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.235

Sources:

Source Unknown

Final 2008 Page 1671 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C01E-28-SF Antipoison Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation Number 017-188C, 5/1/2006

City / County: Lancaster Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH-DSS Shellfish Condemnation Notice 017-188C, 5/1/2006

The upper portion of Antipoison Creek was included on the 1998 303(d) list due to condemnation 188, 6/3/1996. During the 2006 cycle the condemnation expanded considerably. However, during the 2008 cycle, the condemnation was reduced and split into 3 condemnations. As the lower sections were first impaired in the 2006 cycle, the TMDLs for those portions will be due in 2018 and are addressed in fact sheets C01E-50-SF and C01E-51-SF.

Antipoison Creek

Shellfishing

Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.210

Sources:

Source Unknown

Final 2008 Page 1672 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C01E-29-BAC Indian Creek

Location: Area as described in VDH Notice and Description of Shellfish Condemnation Numbers 016-057A and 057B,12/13/2006

City / County: Lancaster Co. Northumberland Co.

Use(s): Recreation

Cause(s) /

VA Category: Enterococcus / 5A

This segment was assessed as not supporting for the Recreation Use in the 2006 cycle due to Enterococci violations at 7-IND002.26 near Kilmarnock Wharf. During the 2008 cycle, the violation rate was 6/39.

Indian Creek

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Enterococcus - Total Impaired Size by Water Type: 0.428

Sources:

Source Unknown

Final 2008 Page 1673 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C01E-32-SF Gougher Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation Number 013-220D, 6/23/2006

City / County: Northumberland Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH-DSS Shellfish Condemnation Notice 013-220D, 6/23/2006

Gougher Creek

Shellfishing

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.036

Sources:

Source Unknown

Final 2008 Page 1674 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C01E-33-SF Betts Mill Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation Number 013-089B, 6/23/2006

City / County: Northumberland Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH-DSS Shellfish Condemnation 013-089B, 6/23/2006

Segment expanded in the 2008 cycle.

Betts Mill Creek

Shellfishing

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.112

Sources:

Source Unknown

Final 2008 Page 1675 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C01E-34-SF Davenport Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation Number 017-188A, 5/1/2006

City / County: Lancaster Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH Shellfish Condemnation 017-188A, 5/1/2006

Davenport Creek

Shellfishing

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.019

Sources:

Source Unknown

Final 2008 Page 1676 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C01E-35-EBEN Mill Creek

Location: The middle portion of Mill Creek from the downstream boundary of condemnation 014-123B, 5/15/2006 to Ingrams Bay.

City / County: Northumberland Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Estuarine Bioassessments / 5A

During the 2008 cycle, a portion of Mill Creek was assessed as impaired of the Aquatic Life Use due to sampling at estuarine probabilistic monitoring station 7-MIL002.00.

Mill Creek

Aquatic Life

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Estuarine Bioassessments - Total Impaired Size by Water Type: 0.246

Sources:

Contaminated Sediments Source Unknown

Final 2008 Page 1677 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C01E-36-SF Towles Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation 014-123C, 5/15/2006

City / County: Northumberland Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH-DSS Shellfish Condemnation Number 014-123C, 5/15/2006

Towles Creek

Estuary Reservoir River

Shellfishing (Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.028

Sources:

Source Unknown

Final 2008 Page 1678 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C01E-37-SF Harveys Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation 014-123A, 5/15/2006

City / County: Northumberland Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH-DSS Shellfish Condemnation Number 014-123A, 5/15/2006

Harveys Creek Estuary Reservoir River
Shellfishing (Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.105

Sources:

Source Unknown

Final 2008 Page 1679 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C01E-38-SF Cranes Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation 013-220C, 6/23/2006

City / County: Northumberland Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH-DSS Shellfish Condemnation Number 013-220C, 6/23/2006

Cranes Creek

Shellfishing

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.200

Sources:

Source Unknown

Final 2008 Page 1680 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C01E-39-SF Barrett Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation013-089F, 6/23/2006

City / County: Northumberland Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH-DSS Shellfish Condemnation Number 013-089F, 6/23/2006

Barrett Creek

Shellfishing

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.022

Sources:

Non-Point Source

Final 2008 Page 1681 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C01E-40-SF Coles Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation013-089C, 6/23/2006

City / County: Northumberland Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH-DSS Shellfish Condemnation Number 013-089C, 6/23/2006

Coles Creek

Shellfishing

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.019

Sources:

Source Unknown

Final 2008 Page 1682 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C01E-41-SF Cockrell Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation Number 012-002B, 9/22/2005.

City / County: Northumberland Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH-DSS Shellfish Condemnation Notice 012-002B, 9/22/2005.

The bacteria TMDL for shellfish impairments in Cockrell Creek is currently under development.

Cockrell Creek

Shellfishing

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.611

Sources:

Industrial Point Source

Discharge

Non-Point Source

Final 2008 Page 1683 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C01E-42-SF Jarvis Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation 015-022J, 5/2/2006

City / County: Lancaster Co. Northumberland Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH-DSS Shellfish Condemnation Number 015-022J, 5/2/2006

Jarvis Creek

Estuary Reservoir River

Shellfishing (Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.016

Sources:

Source Unknown

Final 2008 Page 1684 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C01E-43-SF Old House Cove

Location: Described in VDH Notice and Description of Shellfish Condemnation 015-022A, 5/2/2006

City / County: Northumberland Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH-DSS Shellfish Condemnation Number 015-022A, 5/2/2006

Old House Cove Estuary Reservoir River
Shellfishing (Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.024

Sources:

Source Unknown

Final 2008 Page 1685 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C01E-44-SF Henrys Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation 016-057E, 12/13/2006

City / County: Northumberland Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH-DSS Shellfish Condemnation Number 016-057E, 12/13/2006

Henrys Creek
Shellfishing
Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.044

Sources:

Source Unknown

Final 2008 Page 1686 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C01E-45-SF Barnes Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation 016-057C, 12/13/2006

City / County: Northumberland Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH-DSS Shellfish Condemnation Number 016-057C, 12/13/2006

Barnes Creek

Shellfishing

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.331

Sources:

Source Unknown

Final 2008 Page 1687 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C01E-46-SF Bells Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation 016-057B, 12/13/2006

City / County: Northumberland Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH-DSS Shellfish Condemnation Number 016-057B, 12/13/2006

Bells Creek

Shellfishing

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.042

Sources:

Source Unknown

Final 2008 Page 1688 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C01E-47-SF Long Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation 016-057D, 12/13/2006

City / County: Lancaster Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH-DSS Shellfish Condemnation Number 016-057D, 12/13/2006

Long Creek
Shellfishing
Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.017

Sources:

Source Unknown

Final 2008 Page 1689 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C01E-48-SF Dymer Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation Number 016-024F, 12/13/2006

City / County: Lancaster Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH-DSS Shellfish Condemnation Notice 016-024F, 12/13/2006

The upper portion of Dymer Creek was included on the 1998 303(d) list due to VDH condemnation 24A, 3/5/1997. During the 2006 cycle, the condemnation expanded downstream into Chases Cove. However, during the 2008 cycle, the condemnations shrank and split into two separate condemnations - 016-024A Dymer Creek and 016-024F, Chases Cove. Since Chases Cove was first impaired during the 2006 cycle, the TMDL will be due in 2018.

Dymer Creek
Shellfishing
Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.055

Sources:

Source Unknown

Final 2008 Page 1690 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C01E-49-SF Hunts Cove

Location: Described in VDH Notice and Description of Shellfish Condemnation 016-057B, 12/13/2006

City / County: Lancaster Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH-DSS Shellfish Condemnation Number 016-057B, 12/13/2006

Hunts Cove Estuary Reservoir River
Shellfishing (Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: **0.040**

Sources:

Source Unknown

Final 2008 Page 1691 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C01E-50-SF Antipoison Creek, UT

Location: Described in VDH Notice and Description of Shellfish Condemnation Number 017-188B, 5/1/2006

City / County: Lancaster Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH-DSS Shellfish Condemnation Notice 017-188B, 5/1/2006

The upper portion of Antipoison Creek was included on the 1998 303(d) list due to condemnation 188, 6/3/1996. During the 2006 cycle the condemnation expanded considerably. However, during the 2008 cycle, the condemnation was reduced and split into 3 condemnations. As the lower sections were first impaired in the 2006 cycle, the TMDLs for those portions will be due in 2018.

Antipoison Creek, UT

Shellfishing

Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.033

Sources:

Source Unknown

Final 2008 Page 1692 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C01E-51-SF Antipoison Creek, UT

Location: Described in VDH Notice and Description of Shellfish Condemnation Number 017-188D, 5/1/2006

City / County: Lancaster Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH-DSS Shellfish Condemnation Notice 017-188D, 5/1/2006

The upper portion of Antipoison Creek was included on the 1998 303(d) list due to condemnation 188, 6/3/1996. During the 2006 cycle the condemnation expanded considerably. However, during the 2008 cycle, the condemnation was reduced and split into 3 condemnations. As the lower sections were first impaired in the 2006 cycle, the TMDLs for those portions will be due in 2018.

Antipoison Creek, UT

Shellfishing

Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.006

Sources:

Source Unknown

Final 2008 Page 1693 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C01E-52-SF Oyster Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation 018-053A, 1/4/2005

City / County: Lancaster Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH-DSS Shellfish Condemnation Number 018-053, 1/4/2005

Oyster CreekEstuaryReservoirRiverShellfishing(Sq. Miles)(Acres)(Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.115

Sources:

Source Unknown

Final 2008 Page 1694 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C02R-01-PH Dragon Swamp

Location: From the Route 602 bridge downstream to the tidal limit.

City / County: Gloucester Co. King And Queen Co. Middlesex Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: pH / 5C

The segment is impaired of the Aquatic Life Use based on pH violations at 7-DRN010.48 (Route 603 bridge).

The segment length was changed during the year 2002 cycle because it was determined that Dragon Swamp is tidally influenced to approximately river mile 4.6.

This segment continued to have pH violations at a rate of 7/55 for the 2008 cycle.

Dragon Swamp

Estuary Reservoir River

Aquatic Life (Sq. Miles) (Acres) (Miles)

pH - Total Impaired Size by Water Type:

11.52

Sources:

Natural Conditions - Water Quality Standards Use Attainability Analyses Needed

Final 2008 Page 1695 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C02R-02-DO Dragon Swamp

Location: From the headwaters downstream to the Route 602 bridge. Segment length adjusted in 2006.

City / County: Essex Co. King And Queen Co. Middlesex Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5C

Dragon Swamp was assessed impaired of the Aquatic Life Use in 2004 due to violations of the dissolved oxygen standard at the Route 604 bridge (7-DRN015.51).

The DO violations continued for the 2006 cycle, in which the DO violation rate was 6/15.

Dragon Swamp

Estuary Reservoir River

Aquatic Life (Sq. Miles) (Acres) (Miles)

Oxygen, Dissolved - Total Impaired Size by Water Type: 19.74

Sources:

Natural Conditions - Water Quality Standards Use Attainability Analyses Needed

Final 2008 Page 1696 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C02R-02-PH Dragon Swamp

Location: From the headwaters downstream to the Route 602 bridge. Segment length adjusted in 2006.

City / County: Essex Co. King And Queen Co. Middlesex Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: pH / 5C

Dragon Swamp was assessed impaired of the Aquatic Life Use in 2004 due to violations of the pH standard at the Route 604 bridge (7-DRN015.51).

The pH violations continued for the 2006 cycle, in which the pH violation rate was 6/15.

Dragon Swamp

Estuary Reservoir River

Aquatic Life (Sq. Miles) (Acres) (Miles)

pH - Total Impaired Size by Water Type: 19.74

Sources:

Natural Conditions - Water Quality Standards Use Attainability Analyses Needed

Final 2008 Page 1697 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C02R-03-HG Dragon Swamp/Piankatank River

Location: Dragon Swamp and the Piankatank River from the headwaters near the State Route 620 bridge downstream to Deep Point

Boat Landing (Rt. 606) across from Piankatank Shores.

City / County: Essex Co. Gloucester Co. King And Queen Co. Middlesex Co.

Use(s): Fish Consumption

Cause(s) /

VA Category: Mercury in Fish Tissue / 5A

Dragon Swamp and the Piankatank River are considered impaired of the Fish Consumption Use based on DEQ monitoring which has indicated elevated levels of mercury in largemouth bass. The VDH has issued a fish consumption restriction for largemouth bass in this area.

A portion of this area was considered fully supporting but threatened in 2002 based on these results. Because of the VDH advisory, the segment location was altered and the segment was downgraded to impaired.

In July 2005, VDH extended the Fish Consumption Advisory waterbody boundaries to include the entire length of Dragon Swamp from the headwaters near Rt. 620 downstream to Deep Point Boat Landing. No more than two meals/month of largemouth bass are recommended.

Dragon Swamp/Piankatank River

Estuary (Sq. Miles) Reservoir (Acres)

River (Miles)

Fish Consumption

Mercury in Fish Tissue - Total Impaired Size by Water Type:

3.009

31.26

Sources:

Atmospheric Deposition -

Source Unknown

Toxics

Final 2008 Page 1698 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C02R-04-DO Exol Swamp

Location: Exol Swamp from headwaters to mouth at Dragon Swamp

City / County: King And Queen Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5C

In 2006, this segment was assessed as not supporting for Aquatic Life Use based on violations of the water quality standards for dissolved oxygen at the Rt. 614 bridge (station 7-EXE000.81). During the 2008 cycle, the violation rate was 3/14.

Exol Swamp
Aquatic Life

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Oxygen, Dissolved - Total Impaired Size by Water Type:

12.58

Sources:

Natural Conditions - Water Quality Standards Use Attainability Analyses Needed

Final 2008 Page 1699 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C02R-04-PH Exol Swamp

Location: Exol Swamp from headwaters to mouth at Dragon Swamp

City / County: King And Queen Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: pH / 5C

In 2006, this segment was assessed as not supporting for Aquatic Life Use based on violations of the water quality standards for pH at the Rt. 614 bridge (station 7-EXE000.81). During the 2008 cycle, the violation rate for pH was 2/14.

Exol Swamp
Aquatic Life

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

pH - Total Impaired Size by Water Type: 12.58

Sources:

Natural Conditions - Water Quality Standards Use Attainability Analyses Needed

Final 2008 Page 1700 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C02R-05-DO Dragon Run

Location: The mainstem of Dragon Run from its headwaters to its mouth at Dragon Swamp

City / County: Essex Co. King And Queen Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5C

During the 2008 cycle, Dragon Run was assessed as impaired of the Aquatic Life Use due to a dissolved oxygen violation rate of 4/9 at both the Route 607 and Route 612 bridges (7-DGN000.85 and 7-DGN003.76, respectively).

Dragon Run

Estuary Reservoir River

Aquatic Life

(Sq. Miles) (Acres) (Miles)

Oxygen, Dissolved - Total Impaired Size by Water Type: 7.24

Sources:

Natural Sources

Final 2008 Page 1701 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C03E-02-SF Piankatank River/Harpers Creek

Location: Described in VDH Notice and Description of Shellfish Condemnations 076A and 076B, 6/10/1997.

City / County: Gloucester Co. Middlesex Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 4A

Portion of VDH Shellfish Condemnation 035-076A, 5/30/2006

During the 1998 cycle, the tidal Piankatank River above Anderson Point and Harpers Creek were included on the 303(d) list due to VDH condemnations 76A and 76B (6/10/1997), respectively. In June 2000, the condemnation area expanded and the condemnations were merged. However the shellfish bacteria TMDL, which was developed by the DEQ and approved by EPA on 6/7/2006, only addressed the original upstream areas of the Piankatank River and Harpers Creek. These areas will be considered Category 4A.

During the 2008 cycle, the condemnation expanded again as described in 035-076A, 5/30/2006. Since the condemnation first expanded during the 2002 cycle, the TMDL for the downstream areas will be due in 2014 and are addressed in fact sheet C03E-02-SF2.

Piankatank River/Harpers Creek

Shellfishing

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 2.447

Sources:

Non-Point Source

Final 2008 Page 1702 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C03E-02-SF2 Piankatank River/Harpers Creek

Location: Portion of VDH Notice and Description of Shellfish Condemnation 035-076A, 5/30/2006 not included in the 6/10/1997

condemnation

City / County: Gloucester Co. Middlesex Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

Portion of VDH Shellfish Condemnation 035-076A, 5/30/2006

During the 1998 cycle, the tidal Piankatank River above Anderson Point and Harpers Creek were included on the 303(d) list due to VDH condemnations 76A and 76B (6/10/1997), respectively. In June 2000, the condemnation area expanded and the condemnations were merged. However the shellfish bacteria TMDL, which was developed by the DEQ and approved by EPA on 6/7/2006, only addressed the original upstream areas of the Piankatank River and Harpers Creek. These areas are considered Category 4A.

During the 2008 cycle, the condemnation expanded again as described in 035-076A, 5/30/2006. Since the condemnation first expanded during the 2002 cycle, the TMDL for the downstream areas will be due in 2014.

Piankatank River/Harpers Creek Estuary Reservoir River

Fecal Coliform - Total Impaired Size by Water Type: 1.474

(Sq. Miles)

(Acres)

(Miles)

Sources:

Shellfishing

Non-Point Source

Final 2008 Page 1703 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C03E-03-SF Frenchs Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation 076B, 9/3/2004.

City / County: Gloucester Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

Portion of VDH Shellfish Condemnation 035-076A, 5/30/2006

Frenchs Creek was listed as impaired of the Shellfish Consumption Use during the 2006 cycle based on VDH-DSS Shellfish Condemnation Notice 035-076B, 9/3/2004. During the 2008 cycle, the upstream Piankatank River condemnation and merged with the Frenchs Creek impairment. The TMDL for Frenchs Creek will be due in 2016. Also see C03E-02-SF2.

Frenchs Creek

Estuary Reservoir River

Shellfishing (Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.010

Sources:

Non-Point Source

Final 2008 Page 1704 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C03E-04-SF Ferry Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation 035-076B, 5/30/2006.

City / County: Gloucester Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH-DSS Shellfish Condemnation Notice 035-076B, 5/30/2006

Condemnation expanded in the 2008 cycle.

Ferry Creek
Shellfishing
Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.124

Sources:

Source Unknown

Final 2008 Page 1705 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C03E-05-SF Wilton Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation 034-126A, 8/10/2006

City / County: Middlesex Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 4A

VDH-DSS Shellfish Condemnation Notice 035-126A, 8/10/2006

This segment was originally listed in 1998 as not supporting for the Shellfish Use based on VDH-DSS Shellfish Condemnation 126, 3/2/1993. The "Piankatank River, Lower Watershed TMDL Report for Shellfish Condemnation Areas Listed Due to Bacteria Contamination" was completed and EPA approved on 11/15/2005. Therefore this segment will be assessed as Cat 4A.

Wilton Creek

Shellfishing

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.134

Sources:

Non-Point Source

Final 2008 Page 1706 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C03E-06-SF Healy Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation 129, 3/3/1997.

City / County: Middlesex Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 4A

Portion of VDH-DSS Shellfish Condemnation Notice 034-129A, 8/10/2006

The upper portion of Healy Creek was originally listed in 1998 as not supporting for the Shellfish Use based on VDH-DSS Shellfish Condemnation 129, 3/3/1997. Although the condemnation expanded in 1999, the Piankatank River, Lower Watershed TMDL Report for Shellfish Condemnation Areas Listed Due to Bacteria Contamination, which was completed during the 2006 cycle and approved by EPA on 11/15/2005, only addressed the original upstream portion. This upstream segment will be assessed as Cat 4A, The lower portion will be addressed in fact sheet C03E-13-SF; the TMDL will be due in 2014.

Healy Creek

Shellfishing

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.049

Sources:

Non-Point Source

Final 2008 Page 1707 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C03E-07-SF Moore Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation 034-208A, 10/6/2005.

City / County: Middlesex Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH-DSS Condemnation 034-208A, 10/6/2005

Area expanded in the 2006 cycle.

Moore Creek
Shellfishing
Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.067

Sources:

Source Unknown

Final 2008 Page 1708 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C03E-08-SF Jackson Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation 084A & 084B, 11/1/1996

City / County: Middlesex Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 4A

Portion of VDH-DSS SFC Notice 033-084A, 12/30/2004

Two areas of Jackson Creek were listed as impaired on the 1998 303(d) list due to VDH Condemnation 84A & B, 11/1/1996. Although the condemnations expanded and merged in the 12/30/2004 condemnation, the bacteria TMDL, which was developed by the DEQ and approved by EPA on 6/7/2006 only addressed the original areas. These areas will be classified as Category 4A. The lower portion is addressed in fact sheet C03E-08-SF2; the TMDL for the expansion will be due in 2018.

Jackson CreekEstuaryReservoirRiverShellfishing(Sq. Miles)(Acres)(Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.034

Sources:

Non-Point Source

Final 2008 Page 1709 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C03E-08-SF2 Jackson Creek

Location: Portion of VDH Notice and Description of Shellfish Condemnation 033-084A12/30/2004 not included in condemnations 84A

& 84B, 11/1/1996

City / County: Middlesex Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

Portion of VDH-DSS SFC Notice 033-084A, 12/30/2004

Two areas of Jackson Creek were listed as impaired on the 1998 303(d) list due to VDH Condemnation 84A & B, 11/1/1996. Although the condemnations expanded and merged in the 12/30/2004 condemnation, the bacteria TMDL, which was developed by the DEQ and approved by EPA on 6/7/2006 only addressed the original areas. These areas will be classified as Category 4A. The TMDL for the expansion will be due in 2018.

Jackson CreekEstuaryReservoirRiverShellfishing(Sq. Miles)(Acres)(Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.267

Sources:

Non-Point Source

Final 2008 Page 1710 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C03E-10-EBEN Piankatank River

Location: Piankatank River downstream of Pond Pt. down to just upstream of Iron Pt.

City / County: Mathews Co. Middlesex Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Estuarine Bioassessments / 5A

Based on the information collected from the Coastal 2000 station 7-PNK005.20, the Weight of Evidence estuarine bioassessment results indicated the benthic community was impaired. Therefore this segment was assessed as not supporting for aquatic life use during the 2006 cycle. During the 2008 cycle, additional Coastal 2000 monitoring at station 7-PNK005.35 also indicated benthic impairment.

Piankatank River

Aquatic Life

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Estuarine Bioassessments - Total Impaired Size by Water Type: 1.169

Sources:

Source Unknown

Final 2008 Page 1711 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C03E-11-SF Cobbs Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation 170, 3/2/1993.

City / County: Mathews Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 4A

Portion of VDH-DSS Shellfish Condemnation Notice 034-170A, 8/10/2006

The upper portion of Cobbs Creek was originally listed in 1998 as not supporting for the Shellfish Use based on VDH-DSS Shellfish Condemnation 170, 3/2/1993. Although the condemnation expanded on 10/13/2003, the Piankatank River, Lower Watershed TMDL Report for Shellfish Condemnation Areas Listed Due to Bacteria Contamination, which was completed during the 2006 cycle and approved by EPA on 11/15/2005, only addressed the original upstream portion. The upstream segment will be assessed as Cat 4A. The lower portion is addressed in fact sheet C03E-12-SF; the TMDL for the lower portion will be due in 2018.

Cobbs Creek

Shellfishing

Estuary Reservoir River (Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.045

Sources:

Non-Point Source

Final 2008 Page 1712 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C03E-12-SF Cobbs Creek

Location: Portion of VDH Notice and Description of Shellfish Condemnation 034-170A, 8/10/2006 not included in condemnation 170,

3/2/1993.

City / County: Mathews Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

Portion of VDH-DSS Shellfish Condemnation Notice 034-170A, 8/10/2006

The upper portion of Cobbs Creek was originally listed in 1998 as not supporting for the Shellfish Use based on VDH-DSS Shellfish Condemnation 170, 3/2/1993. Although the condemnation expanded on 10/13/2003, the Piankatank River, Lower Watershed TMDL Report for Shellfish Condemnation Areas Listed Due to Bacteria Contamination, which was completed during the 2006 cycle and approved by EPA on 11/15/2005, only addressed the original upstream portion. The upstream segment will be assessed as Cat 4A. The TMDL for this lower portion will be due in 2018.

Cobbs Creek
Shellfishing
Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.041

Sources:

Non-Point Source

Final 2008 Page 1713 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C03E-13-SF Healy Creek

Location: Portion of VDH Notice and Description of Shellfish Condemnation 034-129A, 8/10/2006 not included in the 3/3/1997

condemnation.

City / County: Middlesex Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

Portion of VDH-DSS Shellfish Condemnation Notice 034-129A, 8/10/2006

The upper portion of Healy Creek was originally listed in 1998 as not supporting for the Shellfish Use based on VDH-DSS Shellfish Condemnation 129, 3/3/1997. Although the condemnation expanded in 1999, the Piankatank River, Lower Watershed TMDL Report for Shellfish Condemnation Areas Listed Due to Bacteria Contamination, which was completed during the 2006 cycle and approved by EPA on 11/15/2005, only addressed the original upstream portion. The upstream segment will be assessed as Cat 4A. The TMDL for the lower portion will be due in 2014.

Healy Creek
Shellfishing

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.022

Sources:

Non-Point Source

Final 2008 Page 1714 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C03E-14-EBEN Piankatank River

Location: River's bend around Berkley Island

City / County: Middlesex Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Estuarine Bioassessments / 5A

During the 2008 cycle, estuarine probabilistic monitoring was conducted at Coastal 2000 station 7-PNK010.41. The data was assessed by DEQ's Central Office staff who assessed the area as impaired due to alteration of the benthic community.

Piankatank River

Aquatic Life

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Estuarine Bioassessments - Total Impaired Size by Water Type: 0.785

Sources:

Source Unknown

Final 2008 Page 1715 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C03E-15-SF Dancing Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation 035-076C, 5/30/2006

City / County: Gloucester Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH Shellfish Condemnation 035-076C, 5/30/2006

Dancing Creek

Shellfishing

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.034

Sources:

Source Unknown

Final 2008 Page 1716 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C03E-16-SF Piankatank River, UT

Location: Described in VDH Notice and Description of Shellfish Condemnation 034-126C, 8/10/2006

City / County: Gloucester Co. Mathews Co. Middlesex Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH Shellfish Condemnation 034-126C, 8/10/2006

Piankatank River, UT Estuary Reservoir River

Shellfishing (Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.007

Sources:

Non-Point Source

Final 2008 Page 1717 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C03E-17-SF Piankatank River, UT

Location: Described in VDH Notice and Description of Shellfish Condemnation 034-126B, 8/10/2006

City / County: Gloucester Co. Mathews Co. Middlesex Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH Shellfish Condemnation 034-126B, 8/10/2006

Piankatank River, UT Estuary Reservoir River

Shellfishing (Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.005

Sources:

Non-Point Source

Final 2008 Page 1718 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C03E-18-SF Cores Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation 034-129B, 8/10/2006

City / County: Middlesex Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH Shellfish Condemnation 034-129B, 8/10/2006

Cores Creek

Shellfishing

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.018

Sources:

Non-Point Source

Final 2008 Page 1719 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C03E-19-SF Porpoise Cove

Location: Described in VDH Notice and Description of Shellfish Condemnation 034-208B, 10/6/2005

City / County: Middlesex Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH-DSS Shellfish Condemnation Notice 034-208B, 10/6/2005

Porpoise Cove Estuary Reservoir River
Shellfishing (Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.011

Sources:

Source Unknown

Final 2008 Page 1720 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C04E-01-SF Queens Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation Number 037-099A, 10/28/2005

City / County: Mathews Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH-DSS SFC Number 037-099A, 10/28/2005

The segment was assessed as impaired in 2004 based on VDH-DSS Shellfish Condemnation 099A, 2/1/2001. During the 2006 cycle, the SFC was reissued on 4/28/2004 and the closed area was shortened and split into two portions (A - 0.23 mi2 and B - 0.02 mi2) which remain closed. During the 2008 cycle, the condemnations expanded and re-merged.

Queens CreekEstuaryReservoirRiverShellfishing(Sq. Miles)(Acres)(Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.271

Sources:

Source Unknown

Final 2008 Page 1721 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C04E-02-SF Milford Haven

Location: Described in VDH Notice and Description of Shellfish Condemnation 036-197A, 9/15/2005

City / County: Mathews Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH-DSS Shellfish Condemnation 036-197A, 9/15/2005

Milford Haven

Estuary Reservoir River

Shellfishing (Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.031

Sources:

Source Unknown

Final 2008 Page 1722 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C04E-03-SF Edwards Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation 036-197B, 9/15/2005

City / County: Mathews Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH-DSS Shellfish Condemnation 036-197B, 9/15/2005

Condemnation expanded during the 2008 cycle.

Edwards Creek

Shellfishing

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.063

Sources:

Source Unknown

Final 2008 Page 1723 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C04E-05-SF Stutts Creek and Morris Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation Numbers 037-061A 10/28/2005

City / County: Mathews Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH Shellfish Condemnation 037-061A, 10/28/2005

Portions of Stutts Creek and Morris Creek were included on the 1998 303(d) list due to VDH Shellfish Condemnations 61A & 61B, 4/4/1997. The condemnations have since merged and separated several times as the condemnations have expanded and contracted. The condemnations are currently merged.

Stutts Creek and Morris Creek

Estuary (Sq. Miles)

Reservoir (Acres)

River (Miles)

Fecal Coliform - Total Impaired Size by Water Type:

0.263

Sources:

Shellfishing

Source Unknown

Final 2008 Page 1724 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C04E-07-SF Billups Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation 037-061B, 10/28/2005

City / County: Mathews Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH Shellfish Condemnation 037-061B, 10/28/2005

Condemnation expanded in the 2008 cycle.

Billups Creek

Estuary Reservoir River

Shellfishing (Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.130

Sources:

Source Unknown

Final 2008 Page 1725 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C04E-08-SF North River

Location: Described in VDH Notice and Description of Shellfish Condemnation Number 157A, 6/3/1997

City / County: Gloucester Co. Mathews Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 4A

Portion of VDH-DSS SFC Number 042-157A, 8/31/2005

The upstream portion of the North River was included on the 1998 303(d) list due to VDH Shellfish Condemnation 157A, 6/3/1997. The condemnation has since expanded, however the DEQ only addressed the original impaired segment during the Bacteria TMDL which was approved by EPA on 6/7/2006. The original portion will be considered Category 4A. The expanded area is addressed in fact sheet C04E-08-SF2; the TMDL is due in 2014 since it first expanded in the 2002 cycle.

North River
Shellfishing

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.330

Sources:

Non-Point Source

Final 2008 Page 1726 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C04E-08-SF2 North River

Location: Portion of VDH Notice and Description of Shellfish Condemnation Number 041-157A, 8/31/2005 not included in

condemnation 157A, 6/3/1997

City / County: Gloucester Co. Mathews Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

Portion of VDH-DSS SFC Number 042-157A, 8/31/2005

The upstream portion of the North River was included on the 1998 303(d) list due to VDH Shellfish Condemnation 157A, 6/3/1997. The condemnation has since expanded, however the DEQ only addressed the original impaired segment during the Bacteria TMDL which was approved by EPA on 6/7/2006. The TMDL for the expanded area is due in 2014 since it first expanded in the 2002 cycle.

North River Estuary Reservoir River
Shellfishing (Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.382

Sources:

Non-Point Source

Final 2008 Page 1727 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C04E-09-SF Elmington Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation 157B, 6/3/1997

City / County: Gloucester Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 4A

Portion of VDH Shellfish Condemnation 042-157B, 8/31/2005

The upstream portion of Elmington Creek was included on the 1998 303(d) list due to VDH Shellfish Condemnation 157B, 6/3/1997. The condemnation has since expanded, however the DEQ only addressed the original impaired segment during the Bacteria TMDL which was approved by EPA on 6/7/2006. The original portion will be considered Category 4A. The expanded area is addressed in fact sheet C04E-09-SF2; the TMDL is due in 2018 since it first expanded in the 2006 cycle.

Elmington Creek
Shellfishing
Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.023

Sources:

Non-Point Source

Final 2008 Page 1728 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C04E-09-SF2 Elmington Creek

Location: Portion of VDH Notice and Description of Shellfish Condemnation 042-157B, 8/31/2005 not included in 157B, 6/3/1997

City / County: Gloucester Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

Portion of VDH Shellfish Condemnation 042-157B, 8/31/2005

The upstream portion of Elmington Creek was included on the 1998 303(d) list due to VDH Shellfish Condemnation 157B, 6/3/1997. The condemnation has since expanded, however the DEQ only addressed the original impaired segment during the Bacteria TMDL which was approved by EPA on 6/7/2006. The TMDL for the expanded area is due in 2018 since it first expanded in the 2006 cycle.

Elmington Creek

Shellfishing

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.009

Sources:

Non-Point Source

Final 2008 Page 1729 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C04E-10-SF Back Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation 042-157C, 8/31/2005

City / County: Gloucester Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 4A

VDH Shellfish Condemnation 042-157C, 8/31/2005

Back Creek was included on the 1998 303(d) list due to VDH Shellfish Condemnation 157C, 6/3/1997. The creek was included in the North River Bacteria TMDL which was approved by EPA on 6/7/2006. The creek will be assessed as a Category 4A water

Back Creek

Shellfishing

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.085

Sources:

Non-Point Source

Final 2008 Page 1730 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C04E-11-SF Blackwater Creek / Greenmansion Cove

Location: Described in VDH Notice and Description of Shellfish Condemnation 131A and 131B, 6/3/1997

City / County: Mathews Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 4A

VDH-DSS Shellfish Condemnation 131A and 131B, 6/3/1997

During the 1998 cycle, the upper portion of Blackwater Creek and Greenmansion Cove were listed as impaired due to VDH Shellfish Condemnations 131A and 131B, 6/3/1997, respectively. In subsequent assessment cycles, the Blackwater condemnation expanded downstream to its mouth at the North River and the two condemnations were merged. However, the DEQ addressed only the 1998 condemned areas in the North River Bacteria TMDL, which was approved by EPA on 6/7/2006.

In the 2008 cycle, the condemnation was reduced and split into two pieces: Greenmansion Cove (042-131A, 6/26/2006) and Oakland Creek (042-131B, 6/26/2006). Greenmansion Cove will be considered Category 4A due to the completed TMDL. Because it is now open for harvest, the upper portion of Blackwater Creek will be considered Category 2C for the Shellfish Use. Oakland Creek was not addressed in the TMDL; since the area was first impaired during the 2006 cycle when the Blackwater Creek condemnation was larger, the TMDL will be due in 2018 (see C04E-11-SF2).

Blackwater Creek / Greenmansion Cove Shellfishing

Estuary (Sq. Miles)

Reservoir (Acres)

River (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.051

Sources:

Non-Point Source

Final 2008 Page 1731 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C04E-11-SF2 Oakland Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation 042-131B, 6/26/2006

City / County: Mathews Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH-DSS Shellfish Condemnation 042-121B, 6/26/2006

During the 1998 cycle, the upper portion of Blackwater Creek and Greenmansion Cove were listed as impaired due to VDH Shellfish Condemnations 131A and 131B, 6/3/1997, respectively. In subsequent assessment cycles, the Blackwater condemnation expanded downstream to its mouth at the North River and the two condemnations were merged. However, the DEQ addressed only the 1998 condemned areas in the North River Bacteria TMDL, which was approved by EPA on 6/7/2006.

In the 2008 cycle, the condemnation was reduced and split into two pieces: Greenmansion Cove (042-131A, 6/26/2006) and Oakland Creek (042-131B, 6/26/2006). Greenmansion Cove will be considered Category 4A due to the completed TMDL. Because it is now open for harvest, the upper portion of Blackwater Creek will be considered Category 2C for the Shellfish Use. Oakland Creek was not addressed in the TMDL; since the area was first impaired during the 2006 cycle when the Blackwater Creek condemnation was larger, the TMDL will be due in 2018.

Oakland Creek

Shellfishing

Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.037

Sources:

Non-Point Source

Final 2008 Page 1732 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C04E-12-SF Davis Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation 042-131C, 6/26/2006

City / County: Gloucester Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH-DSS Shellfish Condemnation 042-131C, 6/26/2006

Condemnation size was reduced in the 2008 cycle.

Davis Creek

Estuary Reservoir River

Shellfishing (Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.035

Sources:

Source Unknown

Final 2008 Page 1733 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C04E-13-SF East River

Location: Described in VDH Notice and Description of Shellfish Condemnation 041-092A, 10/25/2005

City / County: Mathews Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH-DSS Shellfish Condemnation 041-092A, 10/25/2005

Condemnation expanded in the 2008 cycle.

East River Estuary Reservoir River
Shellfishing (Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.636

Sources:

Source Unknown

Final 2008 Page 1734 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C04E-14-SF Put In Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation Number 041-005A, 10/25/2005

City / County: Mathews Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH Shellfish Condemnation 041-005A, 10/25/2005

Condemnation expanded during the 2008 cycle.

Put In Creek

Shellfishing

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.168

Sources:

Source Unknown

Final 2008 Page 1735 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C04E-15-SF Davis Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation 040-085C, 9/26/2006

City / County: Mathews Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH-DSS Shellfish Condemnation 040-085C, 9/26/2006

This cove of Davis Creek has been listed as impaired since the 2002 cycle due to condemnation 85, 9/22/1997. The condemnation expanded in the 2006 cycle, but has since contracted and split into two separate condemnations. See C04E-36-

SF.

Davis Creek

Shellfishing

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.028

Sources:

Source Unknown

Final 2008 Page 1736 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C04E-16-SF Winter Harbor

Location: Described in VDH Notice and Description of Shellfish Condemnation Number 038-178A, 3/2/2005

City / County: Mathews Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH-DSS Shellfish Condemnation 038-178A, 3/2/2005

Winter Harbor Estuary Reservoir River
Shellfishing (Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.119

Sources:

Source Unknown

Final 2008 Page 1737 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C04E-17-BAC Milford Haven

Location: Milford Haven downstream of The Narrows.

City / County: Mathews Co.

Use(s): Recreation

Cause(s) /

VA Category: Enterococcus / 5A

Milford Haven from The Narrows to the mouth was assessed as not supporting the Recreation Use during the 2006 cycle due to an enterococci violation rate of 2/9 at 7-MLF002.40. Further monitoring was recommended to confirm the impairment due to the small data set and an acceptable fecal coliform violation rate (0/23.) During the 2008 cycle, the enterococci violation rate is 2/18

Milford Haven

Estuary Reservoir River

(Sq. Miles) (Acres) (Miles)

Enterococcus - Total Impaired Size by Water Type: 1.507

Sources:

Source Unknown

Final 2008 Page 1738 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C04E-18-SF Horn Harbor

Location: Described in VDH Notice and Description of Shellfish Condemnation 039-026A, 5/3/2006

City / County: Mathews Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH-DSS Shellfish Condemnation 039-026A, 5/3/2006

Size increased during the 2008 cycle.

Horn Harbor Estuary Reservoir River
Shellfishing (Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.137

Sources:

Source Unknown

Final 2008 Page 1739 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C04E-19-SF Doctors Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation 039-026B, 5/3/2006

City / County: Mathews Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH-DSS Shellfish Condemnation 039-026B, 5/3/2006

Condemnation expanded in the 2008 cycle.

Doctors Creek

Shellfishing

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.015

Sources:

Source Unknown

Final 2008 Page 1740 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C04E-22-SF Pepper Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation Number 040-085B, 9/26/2006

City / County: Mathews Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH-DSS Shellfish Condemnation 040-085B, 9/26/2006

Pepper Creek

Shellfishing

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.031

Sources:

Source Unknown

Final 2008 Page 1741 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C04E-25-SF Winder Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation 037-099B, 10/28/2005

City / County: Mathews Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH-DSS Shellfish Condemnation 037-099B, 10/28/2005

Condemnation expanded in the 2008 cycle.

Winder Creek

Shellfishing

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.021

Sources:

Source Unknown

Final 2008 Page 1742 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C04E-27-SF East River, UT

Location: Described in VDH Notice and Description of Shellfish Condemnation 041-212B, 10/25/2005

City / County: Mathews Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH-DSS Shellfish Condemnation 041-212B, 10/25/2005

East River, UT

Shellfishing

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.026

Sources:

Source Unknown

Final 2008 Page 1743 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C04E-28-SF Barn Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation Number 036-197C, 9/15/2005

City / County: Mathews Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH-DSS Shellfish Condemnation 036-197C, 9/15/2005

Barn Creek
Shellfishing
Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.042

Sources:

Source Unknown

Final 2008 Page 1744 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C04E-29-SF Miles Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation Number 041-212K, 10/25/2005

City / County: Mathews Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH-DSS Shellfish Condemnation 041-212K, 10/25/2005

Condemnation expanded in the 2008 cycle.

Miles Creek

Shellfishing

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.042

Sources:

Source Unknown

Final 2008 Page 1745 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C04E-30-SF Lanes Creek, UT

Location: Described in VDH Notice and Description of Shellfish Condemnation 037-099C, 10/28/2005

City / County: Mathews Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH Shellfish Condemnation 037-099C, 10/28/2005

Lanes Creek, UT Estuary Reservoir River
Shellfishing (Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: **0.002**

Sources:

Source Unknown

Final 2008 Page 1746 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C04E-31-SF Stutts Creek (Hole in the Wall)

Location: Described in VDH Notice and Description of Shellfish Condemnation 037-061C, 10/28/2005

City / County: Mathews Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH Shellfish Condemnation 037-061C, 10/28/2005

Stutts Creek (Hole in the Wall)

Shellfishing (Sq. Miles) (Acres)

Estuary

Reservoir

River

(Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.026

Sources:

Source Unknown

Final 2008 Page 1747 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C04E-32-SF Hudgins Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation 037-061D, 10/28/2005

City / County: Mathews Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH Shellfish Condemnation 037-061D, 10/28/2005

Hudgins Creek

Shellfishing

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.014

Sources:

Source Unknown

Final 2008 Page 1748 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C04E-33-SF Winter Harbor

Location: Described in VDH Notice and Description of Shellfish Condemnation 038-178B, 3/2/2005

City / County: Mathews Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH Shellfish Condemnation 038-178B, 3/2/2005

Winter Harbor Estuary Reservoir River
Shellfishing (Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.241

Sources:

Source Unknown

Final 2008 Page 1749 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C04E-34-SF Dyer Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation 039-100, 2/1/2005

City / County: Mathews Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH-DSS Shellfish Condemnation 039-100A, 2/1/2005

Dyer Creek

Shellfishing

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.033

Sources:

Source Unknown

Final 2008 Page 1750 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C04E-35-SF Sloop Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation 040-085A, 9/26/2006

City / County: Mathews Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH-DSS Shellfish Condemnation 040-085A, 9/26/2006

Sloop Creek

Shellfishing

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.050

Sources:

Source Unknown

Final 2008 Page 1751 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C04E-36-SF Davis Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation 040-085D, 9/26/2006

City / County: Mathews Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH-DSS Shellfish Condemnation 040-085D, 9/26/2006

This portion of Davis Creek was originally listed as impaired on the 2006 303(d) list because the 2002 impairment expanded. During the 2008 cycle, the condemnation size was reduced and split into two separate condemnations. As this cove was first impaired in the 2006 cycle, the TMDL will be due in 2018.

Davis Creek

Shellfishing

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.011

Sources:

Source Unknown

Final 2008 Page 1752 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C04E-37-SF Whites Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation 041-212E, 10/25/2005

City / County: Mathews Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH-DSS Shellfish Condemnation 041-212E, 10/25/2005

Whites Creek

Estuary Reservoir River

Shellfishing (Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.017

Sources:

Source Unknown

Final 2008 Page 1753 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C04E-38-SF East River, UT

Location: Described in VDH Notice and Description of Shellfish Condemnation 041-212F, 10/25/2005

City / County: Mathews Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH-DSS Shellfish Condemnation 041-212F, 10/25/2005

East River, UT

Shellfishing

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.016

Sources:

Source Unknown

Final 2008 Page 1754 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C04E-39-SF East River, UT

Location: Described in VDH Notice and Description of Shellfish Condemnation 041-212G, 10/25/2005

City / County: Mathews Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH-DSS Shellfish Condemnation 041-212G, 10/25/2005

East River, UT

Shellfishing

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.020

Sources:

Source Unknown

Final 2008 Page 1755 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C04E-40-SF Tabbs Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation 041-212D, 10/25/2005

City / County: Mathews Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH-DSS Shellfish Condemnation 041-212D, 10/25/2005

Tabbs Creek Estuary Reservoir River
Shellfishing (Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.082

Sources:

Source Unknown

Final 2008 Page 1756 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C04E-41-SF Thomas Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation 041-212H, 10/25/2005

City / County: Mathews Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH-DSS Shellfish Condemnation 041-212H, 10/25/2005

Thomas Creek Estuary Reservoir River
Shellfishing (Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.027

Sources:

Source Unknown

Final 2008 Page 1757 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C04E-42-SF Weston Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation 041-212C, 10/25/2005

City / County: Mathews Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH-DSS Shellfish Condemnation 041-212C, 10/25/2005

Weston Creek

Shellfishing

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.037

Sources:

Source Unknown

Final 2008 Page 1758 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C04E-43-SF Raines Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation 041-212I, 10/25/2005

City / County: Mathews Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH-DSS Shellfish Condemnation 041-212I, 10/25/2005

Raines Creek

Shellfishing

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.039

Sources:

Source Unknown

Final 2008 Page 1759 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C04E-44-SF East River, UT

Location: Described in VDH Notice and Description of Shellfish Condemnation 041-212A, 10/25/2005

City / County: Mathews Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH-DSS Shellfish Condemnation 041-212A, 10/25/2005

East River, UT

Shellfishing

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.025

Sources:

Source Unknown

Final 2008 Page 1760 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C04E-45-SF East River, UT

Location: Described in VDH Notice and Description of Shellfish Condemnation 041-212J, 10/25/2005

City / County: Mathews Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH-DSS Shellfish Condemnation 041-212J, 10/25/2005

East River, UT

Shellfishing

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.026

Sources:

Source Unknown

Final 2008 Page 1761 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C04E-46-SF East River, UT

Location: Described in VDH Notice and Description of Shellfish Condemnation 041-212L, 10/25/2005

City / County: Mathews Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH-DSS Shellfish Condemnation 041-212L, 10/25/2005

East River, UT

Shellfishing

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: **0.004**

Sources:

Source Unknown

Final 2008 Page 1762 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C04E-47-SF Belleville Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation 042-157D, 8/31/2005

City / County: Gloucester Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH Shellfish Condemnation 042-157D, 8/31/2005

Belleville Creek

Shellfishing

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.053

Sources:

Source Unknown

Final 2008 Page 1763 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C04R-02-BAC Burke Mill Stream

Location: Burke Mill Stream from Burke Pond to extent of tide.

City / County: Gloucester Co. Mathews Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

The segment was assessed as impaired of the Recreation Use in 2004 based on a fecal coliform violations at the Route 3/Route 14 bridge (7-BUR001.19).

During the 2008 cycle, the E. coli violation rate was 2/10, therefore the impairment converted to E. coli. The original TMDL due date of 2016 is maintained.

Burke Mill Stream

Estuary Reservoir River

(Sq. Miles) (Acres) (Miles)

Escherichia coli - Total Impaired Size by Water Type: 2.18

Sources:

Source Unknown

Final 2008 Page 1764 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C04R-02-DO Burke Mill Stream

Location: Burke Mill Stream from Burke Pond to extent of tide.

City / County: Gloucester Co. Mathews Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5A

The segment was assessed as impaired of the Aquatic Life Use in 2008 based on a dissolved oxygen violation rate of 4/12 at the Route 3/Route 14 bridge (7-BUR001.19).

Burke Mill Stream

Estuary Reservoir River

Aquatic Life (Sq. Miles) (Acres) (Miles)

Oxygen, Dissolved - Total Impaired Size by Water Type: 2.18

Sources:

Source Unknown

Final 2008 Page 1765 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C05E-01-SF Ware River / Fox Mill Run

Location: Described in VDH Notice and Description of Shellfish Condemnation 096A and 096B, 8/12/1996

City / County: Gloucester Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 4A

Portion of VDH Shellfish Condemnation 043-096A, 9/15/2006

Fox Mill Run and a portion of the Ware River were included on the 1998 303(d) list due to VDH Shellfish Condemnation 96B and 96A, 8/12/1996. The Ware River condemnation has since expanded to incorporate the Fox Mill Run impairment. However, the DEQ developed the Bacteria TMDL for only the original 1998 portions; the TMDL was approved by EPA on 6/7/2006. The 1998 portions will be considered Category 4A waters. The expanded area of the Ware River is addressed in fact sheet C05E-01-SF2; the TMDL will be due in 2014 since it first expanded in the 2002 list.

Ware River / Fox Mill Run

Estuary Reservoir River

Shellfishing (Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.339

Sources:

Non-Point Source

Final 2008 Page 1766 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C05E-01-SF2 Ware River

Location: Portion of VDH Notice and Description of Shellfish Condemnation 043-096A, 9/15/2006 not included in 096A and 096B,

8/12/1996

City / County: Gloucester Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

Portion of VDH Shellfish Condemnation 043-096A, 9/15/2006

Fox Mill Run and a portion of the Ware River were included on the 1998 303(d) list due to VDH Shellfish Condemnation 96B and 96A, 8/12/1996. The Ware River condemnation has since expanded to incorporate the Fox Mill Run impairment. However, the DEQ developed the Bacteria TMDL for only the original 1998 portions; the TMDL was approved by EPA on 6/7/2006. The TMDL for the expanded portion of the Ware River will be due in 2014 since it first expanded in the 2002 list.

Ware River

Shellfishing

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.262

Sources:

Non-Point Source

Final 2008 Page 1767 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C05E-02-SF Wilson Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation Number 106, 8/12/1996

City / County: Gloucester Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 4A

Portion of VDH Shellfish Condemnation 043-096B, 9/15/2006

A portion of Wilson Creek was included on the 1998 303(d) list due to VDH Shellfish Condemnation 106, 8/12/1996. The condemnation has since expanded and contracted and is currently larger than it was in the 1998 cycle. However, the DEQ developed the Bacteria TMDL for only the original 1998 portion; the TMDL was approved by EPA on 6/7/2006. The 1998 portion will be considered a Category 4A water. The expanded area is addressed in fact sheet C05E-02-SF2; the TMDL will be due in 2014 since it first expanded in the 2002 list.

Wilson Creek

Shellfishing

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.032

Sources:

Non-Point Source

Final 2008 Page 1768 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C05E-02-SF2 Wilson Creek

Location: Portion of VDH Notice and Description of Shellfish Condemnation 043-096B, 9/15/2006 not included in 106, 8/12/1996

City / County: Gloucester Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

Portion of VDH Shellfish Condemnation 043-096B, 9/15/2006

A portion of Wilson Creek was included on the 1998 303(d) list due to VDH Shellfish Condemnation 106, 8/12/1996. The condemnation has since expanded and contracted and is currently larger than it was in the 1998 cycle. However, the DEQ developed the Bacteria TMDL for only the original 1998 portion; the TMDL was approved by EPA on 6/7/2006. The TMDL for the enlarged portion will be due in 2014 since it first expanded in the 2002 list.

Wilson Creek
Shellfishing
Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.122

Sources:

Non-Point Source

Final 2008 Page 1769 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C05R-01-BAC Fox Mill Run

Location: From its headwaters to the limit of tide.

City / County: Gloucester Co.

Use(s): Recreation

Cause(s) /

VA Category: Fecal Coliform / 5A

In 2002, the segment was assessed not supporting of the Recreation Use because of a fecal coliform violation rate of 5/18 at the Route 17 bridge (7-FOX002.49).

Fox Mill Run

Estuary Reservoir River

(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 7.37

Sources:

Source Unknown

Final 2008 Page 1770 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C05R-01-DO Fox Mill Run

Location: From its headwaters to the limit of tide.

City / County: Gloucester Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5A

In 2002, the segment was assessed not supporting of the Aquatic Life Use because of a dissolved oxygen violation rate of 2/19 at the Route 17 bridge (7-FOX002.49).

Fox Mill Run

Estuary Reservoir River

Aquatic Life

(Sq. Miles) (Acres) (Miles)

Oxygen, Dissolved - Total Impaired Size by Water Type: 7.37

Sources:

Source Unknown

Final 2008 Page 1771 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C06E-01-SF Northwest Branch Severn River / Vaughns Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation Number 093A and 093B, 4/1/1997

City / County: Gloucester Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 4A

Portion of VDH-DSS Shellfish Condemnation 044-093A, 2/15/2006

The upper portion of the Northwest Branch Severn River and a portion of Vaughns Creek were included on the 1998 303(d) list due to VDH Shellfish Condemnations 93A and 93B, 4/1/1997, respectively. Over various assessment cycles the condemnations have merged and split several times as the condemnations have expanded downstream in the NW Branch Severn. As of condemnation 044-093A, 2/15/2006 the condemnations were merged. However the Bacteria TMDL for the Shellfish Impairments in the Severn River Watershed (approved by EPA on 6/7/2006) only addressed the original upstream areas, which will be considered Category 4A. The downstream expansion is addressed in fact sheet C06E-03-SF; the TMDL will be due in 2020.

Northwest Branch Severn River / Vaughns Creek **Shellfishing**

Estuary (Sq. Miles) Reservoir (Acres)

River (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.455

Sources:

Non-Point Source

Final 2008 Page 1772 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C06E-02-SF Monday Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation Number 125, 12/31/1996

City / County: Gloucester Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 4A

VDH DSS Shellfish Condemnation 045-125A, 11/20/2006

A portion of Monday Creek was included on the 1998 303(d) list due to VDH Shellfish Condemnation 25A, 12/31/1996. The condemnation has since decreased in size. The TMDL for the entire original area was completed during the 2008 cycle and was approved by EPA on 6/7/2006. The portion that is currently impaired will be considered Category 4A; the portion now open for harvest will be considered Category 2C for the Shellfish Consumption Use.

Monday Creek
Shellfishing
Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.056

Sources:

Non-Point Source

Final 2008 Page 1773 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C06E-03-SF Northwest Branch Severn River

Location: Portion of VDH Notice and Description of Shellfish Condemnation 044-093A, 2/15/2006 not included in 093A and 093B,

4/1/1997

City / County: Gloucester Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

Portion of VDH-DSS Shellfish Condemnation 044-093A, 2/15/2006

The upper portion of the Northwest Branch Severn River and a portion of Vaughns Creek were included on the 1998 303(d) list due to VDH Shellfish Condemnations 93A and 93B, 4/1/1997, respectively. Over various assessment cycles the condemnations have merged and split as the condemnations have expanded downstream in the NW Branch Severn. As of condemnation 044-093A, 2/15/2006 the condemnations were merged. However the Bacteria TMDL for the Shellfish Impairments in the Severn River Watershed (approved by EPA on 6/7/2006) only addressed the original upstream areas, which will be considered Category 4A. The TMDL for the downstream expansion will be due in 2020.

Northwest Branch Severn River

Estuary (Sq. Miles)

Reservoir (Acres)

River (Miles)

Fecal Coliform - Total Impaired Size by Water Type:

0.174

Sources:

Shellfishing

Non-Point Source

Final 2008 Page 1774 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C06E-04-SF Heywood Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation Number 101, 4/1/1997

City / County: Gloucester Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 4A

Portion of VDH DSS Shellfish Condemnation 044-054B, 2/15/2006

Heywood Creek was listed on the 1998 303(d) list due to VDH Shellfish Condemnation 101, 4/1/1997. The TMDL for this area was completed during the 2008 cycle and was approved by EPA on 6/7/2006. However, on 2/15/2006 the condemnation was expanded, merging with the Thorntons Creek condemnation and expanding downstream the Southwest Branch Severn River. The 1998 portion of Heywood Creek will be considered a Category 4A water. The expansion is addressed in fact sheet C06E-11-SF; the TMDL will be due in 2020.

Heywood Creek

Shellfishing

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.166

Sources:

Non-Point Source

Final 2008 Page 1775 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C06E-05-SF Thorntons Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation Number 054, 4/1/1997

City / County: Gloucester Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 4A

Portion of VDH DSS Shellfish Condemnation 044-054B, 2/15/2006

Thorntons Creek was listed on the 1998 303(d) list due to VDH Shellfish Condemnation 54, 4/1/1997. The TMDL for this area was completed during the 2008 cycle and was approved by EPA on 6/7/2006. However, on 2/15/2006 the condemnation was expanded, merging with the Heywood Creek condemnation and expanding downstream the Southwest Branch Severn River. The 1998 portion of Thornton's Creek will be considered a Category 4A water. The expansion is addressed in fact sheet C06E-11-SF; the TMDL will be due in 2020.

Thorntons Creek

Shellfishing

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.079

Sources:

Non-Point Source

Final 2008 Page 1776 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C06E-06-SF Whittaker Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation 044-093D, 2/15/2006

City / County: Gloucester Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH Shellfish Condemnation 044-093D, 2/15/2006

Whittaker Creek

Shellfishing

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.066

Sources:

Source Unknown

Final 2008 Page 1777 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C06E-07-SF Sterling Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation 044-093B, 2/15/2006

City / County: Gloucester Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH Shellfish Condemnation 044-093B, 2/15/2006

Sterling Creek

Shellfishing

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.026

Sources:

Source Unknown

Final 2008 Page 1778 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C06E-08-SF Free School Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation 044-093C, 2/15/2006

City / County: Gloucester Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 4A

VDH Shellfish Condemnation 044-093C, 2/15/2006

Free School Creek was included on the 1998 303(d) list due to VDH condemnation 189, 4/1/1997. The condemnation was later rescinded on 4/15/2002 and the creek was delisted during the 2004 cycle. It remained open in the 2006 cycle, however was later condemned and was therefore addressed in the Severn River Watershed Bacteria TMDL for Shellfish Impairments. The TMDL was developed during the 2008 cycle and was approved by EPA on 6/7/2006. Since Free School Creek is currently impaired due to Shellfish Condemnation 044-093C 2/15/2006, the segment will be considered a Category 4A water.

Free School Creek

Shellfishing

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.071

Sources:

Non-Point Source

Final 2008 Page 1779 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C06E-09-SF Willetts Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation 044-054C, 2/15/2006

City / County: Gloucester Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH Shellfish Condemnation 044-054C, 2/15/2006

Willetts Creek

Shellfishing

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.128

Sources:

Source Unknown

Final 2008 Page 1780 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C06E-10-SF Rowes Creek

Location: Described in VDH Notice and Description of Shellfish Condemnation 044-054A, 2/15/2006

City / County: Gloucester Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

VDH Shellfish Condemnation 044-054A, 2/15/2006

Rowes Creek

Shellfishing

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.033

Sources:

Source Unknown

Final 2008 Page 1781 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C06E-11-SF

Southwest Branch Severn River

Location: Portion of VDH Notice and Description of Shellfish Condemnation 044-054B, 2/15/2006 not included in the 4/1/1997

condemnations #101 and #54

City / County: Gloucester Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

Portion of VDH DSS Shellfish Condemnation 044-054B, 2/15/2006

Heywood Creek and Thorntons Creek were listed on the 1998 303(d) list due to VDH Shellfish Condemnation 101 and 54 (4/1/1997), respectively. The TMDLs for these areas were completed during the 2008 cycle and were approved by EPA on 6/7/2006. However, on 2/15/2006 the condemnations were expanded, merging and expanding downstream the Southwest Branch Severn River. The 1998 portions will be considered Category 4A waters. The TMDL for the downstream area will be due in 2020.

Southwest Branch Severn River

Shellfishing

Estuary (Sq. Miles)

Reservoir (Acres)

River (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.090

Sources:

Non-Point Source

Final 2008 Page 1782 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C06R-01-BAC Northwest Branch of Severn River

Location: From its headwaters to the limit of tide.

City / County: Gloucester Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

The segment was initially assessed as not supporting of the Recreation Use goal because of fecal coliform violations at 7-SEN004.04, located near private road off Rt. 614. The TMDL is due in 2014.

During the 2008 cycle, the E. coli violation rate was 7/11, therefore the impairment was converted. The original TMDL due date is maintained.

Northwest Branch of Severn River

Estuary (Sq. Miles) Reservoir (Acres)

River (Miles)

Escherichia coli - Total Impaired Size by Water Type:

2.69

Sources:

Recreation

Source Unknown

Final 2008 Page 1783 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C06R-01-CHLR Northwest Branch of Severn River

Location: From its headwaters to the limit of tide.

City / County: Gloucester Co.

Use(s): Aquatic Life Wildlife

Cause(s) /

VA Category: Chloride / 5C

The segment was initially listed in 2004 for the Aquatic Life and Wildlife Uses due to two chloride violations at 7-SEN004.04. There has been no additional chloride monitoring since 2001. The TMDL is due in 2016.

Northwest Branch of Severn River Aquatic Life		Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
· 	Chloride - Total Impaired Size by Water Type:			2.69
Northwest Branch of Severn River Wildlife		Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
	Chloride - Total Impaired Size by Water Type:			2.69

Sources:

Natural Conditions - Water Quality Standards Use Attainability Analyses Needed

Final 2008 Page 1784 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C06R-01-DO Northwest Branch of Severn River

Location: From its headwaters to the limit of tide.

City / County: Gloucester Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5A

During the 2008 cycle, station 7-SEN004.04 had a dissolved oxygen violation rate of 2/12, therefore the segment was considered impaired of the Aquatic Life Use. The TMDL is due in 2020.

Northwest Branch of Severn River

Aquatic Life

Estuary (Sq. Miles)

Reservoir (Acres)

River (Miles)

Oxygen, Dissolved - Total Impaired Size by Water Type:

2.69

Sources:

Source Unknown

Final 2008 Page 1785 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C07E-01-BAC Brick Kiln Creek

Location: This cause encompasses from 0.3 mi. downstream of Big Bethel Res. dam (approx. RM 5.0, end of tidal waters north of Ebenezer Church) downstream to confluence with Northwest Br. Back R. Portion of DSS shellfish condemn #054-021C

(effective 2004-06-02).

City / County: Hampton City York Co.

Use(s): Recreation

Cause(s) /

VA Category: Enterococcus / 4A

The Recreation Use is impaired due to Enterococcus concentrations exceeding the swimming indicator criteria (19 viol/24 obs). Covered under TMDL ID # 31233 (8/2/2006). 1998 CD segment for FC & DO (Attachment A, Category 1, Part 1) VAT-C07E-

01. Previously (2006 IR) listed under TMDL-ID: VAT-C07E-01.

Brick Kiln Creek

Estuary Reservoir River

(Sq. Miles) (Acres) (Miles)

Enterococcus - Total Impaired Size by Water Type: 0.086

Sources:

Source Unknown

Final 2008 Page 1786 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C07E-01-PCB

Chesapeake Bay & Tidal Tributaries VDH Fish Consumption Advisory for **PCBs**

Location: This cause encompasses the Chesapeake Bay & Tidal Tributaries within the lower bay.

Poquoson City City City / County: Hampton City York Co.

Use(s): Fish Consumption

Cause(s) /

VA Category: PCB in Fish Tissue / 5A

The Fish Consumption Use is impaired based on the VDH fish consumption advisory for PCBs fish tissue contamination within the Chesapeake Bay issued 12/13/04. Previous Use ID (2006 IR) as TMDL ID: VDH-Bay PCBs.

Chesapeake Bay & Tidal Tributaries VDH Fish Consumption Advisory for PCBs

Reservoir Estuary (Sq. Miles)

(Acres)

River

(Miles)

Fish Consumption

PCB in Fish Tissue - Total Impaired Size by Water Type:

9.988

Sources:

Source Unknown

Final 2008 Page 1787 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C07E-01-SF **Brick Kiln Creek**

Location: This cause encompasses from 0.3 mi. downstream of Big Bethel Res. dam (approx. RM 5.0, end of tidal waters north of Ebenezer Church) downstream to confluence with Northwest Br. Back R. CBP Segment MOBPH. Portion of DSS shellfish

condemn #054-021C (effective 2004-06-02).

City / County: Hampton City York Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 4A

The Shellfishing Use is not supporting due to

DSS shellfish direct harvesting condemnation # 054-021C (effective 2004-06-02). Covered under TMDL ID 31201, Back River

Northwest Branch (8/2/2006). Previously (2006 IR) listed as TMDL-ID: VAT-C07E-21.

Brick Kiln Creek Estuary Reservoir River (Sq. Miles) (Acres) (Miles) **Shellfishing**

> Fecal Coliform - Total Impaired Size by Water Type: 0.086

Sources:

Source Unknown

Final 2008 Page 1788 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C07E-02-BAC **Newmarket Creek - Upper**

Location: This cause encompasses from the end of tidal waters at Terrant ES (approx. RM 5.1) downstream to I-64 crossing (RM 3.68). South of Blue Bird Gap Farm area. CBP Segment MOBPH. Portion of DSS shellfish condemnation # 054-021 C

(effective 2006-10-19).

City / County: Hampton City

Use(s): Recreation

Cause(s) /

VA Category: Enterococcus / 4A

The Recreation Use is impaired due to Enterococcus concentrations (8 violates / 12 obs.) exceeding the swimming indicator criteria (the previous Fecal Coliform indicator bacteria impairment no longer applies, replaced by Enterococcus criteria impairment, with the same TMDL due date as the FC impairment, since the threshold of 12 observations has been reached).

1998 CD segment for FC & DO (Attachment A, Category 1, Part 1) VAT-C07E-03. Covered under TMDL ID 31201, Back River Northwest Branch, VAT-C07E-02, and for Fecal Coliform, TMDL ID 31234, EPA approved 8/2/2006.

Newmarket Creek - Upper

Recreation

Estuary Reservoir (Sq. Miles) (Acres)

River (Miles)

Enterococcus - Total Impaired Size by Water Type: 0.152

Sources:

Source Unknown

Final 2008 Page 1789 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C07E-04-BAC Poquoson River - Upper

Location: This cause encompasses from Pilney Point Estates downstream to end of Calthrop Neck. CBP Segment MOBPH. DSS shellfish condemn # 053-137 C (20060310).

City / County: York Co.

Use(s): Recreation

Cause(s) /

VA Category: Enterococcus / 4A

Enterococcus / 5A

The Recreation Use is impaired due to Enterococcus concentrations (10 violates / 13 obs.) exceeding the swimming indicator criteria (the previous Fecal Coliform indicator bacteria impairment no longer applies, replaced by Enterococcus criteria impairment, with the same TMDL due date as the FC impairment, since the threshold of 12 observations has been reached). Previously (2006 IR) listed as TMDL-ID: VAT-C07E-04.

1998 CD segment for FC (Attachment A, Category 1, Part 1) VAT-C07E-04. Not contained within the area of TMDL (Poquoson River, VAT-C07E-11-SF [25403], 8/2/2006])

Poquoson River - Upper Estuary Reservoir River Recreation (Sq. Miles) (Acres) (Miles)

Enterococcus - Total Impaired Size by Water Type: 0.517

Sources:

Source Unknown

Final 2008 Page 1790 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C07E-05-BAC Southwest Branch - Back River

Location: This cause encompasses from Langley View downstream to confluence with mainstem back R. CBP segment MOBPH. portion of DSS shellfish condemnation # 054-021E (effective 2004-06-02).

City / County: Hampton City

Use(s): Recreation

Cause(s) /

VA Category: Fecal Coliform / 5A

The Recreation Use is impaired due to previous Fecal Coliform data recorded during the 2002 IR which indicated exceedance of the bactreia criteria, there are no current data to assess the Recreation Use. Previous DEQ station showed impairment @7-SWB000.00 for Fecal Coliform bacteria (2002 IR).

Southwest Branch - Back River

Recreation

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.208

Sources:

Source Unknown

Final 2008 Page 1791 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C07E-06-SF

Lambs Creek - Poquoson River

Location: This cause encompasses this south shore tributary to Poquoson R, west of Poquoson Shores. On border of Poquoson/York boundary. Between Moores Cr. and Roberts Cr to east. CBP Segment MOBPH. DSS Shellfish condemnation # 053-137 D (effective 2006-03-10).

City / County: Poquoson City City

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 4A

The Shellfishing Use is not supporting due to DSS Shellfish condemnation # 053-137 E (effective 2004-04-26). Covered under TMDL ID VAT-C07E-06-SF (31190), Lambs Creek (Poquuson River), EPA approved 8/2/2006.

Lambs Creek - Poquoson River

Shellfishing

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.163

Sources:

Source Unknown

Final 2008 Page 1792 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C07E-07-SF

Patricks Creek - Poquoson River

Location: This cause encompasses this north shore trib to Poquoson R. South of Dare area. CBP Segment MOBPH. DSS Shellfish condemnation # 053-137 B (effective 20060310).

City / County: York Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 4A

The Shellfishing Use is not supporting due to DSS Shellfish condemnation # 053-137 B (effective 20060310). 2006 IR ID= # 053-137D. Including Moores & Quarter March Creeks. Covered under TMDL ID VAT-C07E-07-SF (31196), Patricks Creek (Poqouson River), EPA approved 8/2/2006.

Patricks Creek - Poquoson River

Estuary (Sq. Miles)

Reservoir (Acres)

River (Miles)

Fecal Coliform - Total Impaired Size by Water Type:

0.098

Sources:

Shellfishing

Source Unknown

Final 2008 Page 1793 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C07E-08-SF

Roberts Creek - Upper

Location: This cause encompasses this tributary, south of mouth of Poquoson R., between Hunts Pt. and Griffins Beach areas. CBP Segment MOBPH. DSS Shellfish condemnation # 053-222 A (effective 20060310).

City / County: Poquoson City City

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 4A

The Shellfishing Use is not supporting due to DSS Shellfish condemnation # 053-222 A. 1998 CD segment for shellfish (Attachment A, Category 3) VAT-C07E-08. Covered under TMDL ID VAT-C07E-08-SF (31194), Roberts Creek (Poqouson River), EPA approved 8/2/2006.

Roberts Creek - Upper

Shellfishing

Estuary (Sq. Miles)

Reservoir (Acres)

River (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.104

Sources:

Source Unknown

Final 2008 Page 1794 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C07E-09-SF White House Cove

Location: This cause encompasses this tributary, located in York Haven Anchorage area, south of mouth of Poquoson R. CBP segment MOBPH. Portion of DSS Shellfish condemnation # 053-222 C (effective 20060310).

City / County: Poquoson City City

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 4A

The Shellfishing Use is not supporting due to DSS Shellfish condemnation # 053-222 C (effective 20060310). 2006 IR DSS ID of shellfish condemnation # 053-137 H.

1998 CD segment for shellfish (Attachment A, Category 3) VAT-C07E-09. Covered under TMDL ID VAT-C07E-09-SF (31198), Whitehouse Cove (Poqouson River), EPA approved 8/2/2006.

White House Cove Estuary Reservoir River
Shellfishing (Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.144

Sources:

Source Unknown

Final 2008 Page 1795 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C07E-10-BAC Southwest Branch - Back River

Location: This cause encompasses the headwaters of Southwest Branch downstream to Langley View. Includes Tides Mill Cr. CBP segment MOBPH. Portion of DSS shellfish condemnation # 054-021E (effective 2004-06-02).

City / County: Hampton City

Use(s): Recreation

Cause(s) /

VA Category: Fecal Coliform / 4A

The Recreation Use is impaired due to previous Fecal Coliform data recorded during the 2002 IR which indicated exceedance of the bactreia criteria, there are no current data to assess the Recreation Use. Previous DEQ station showed impairment @7-SWB000.00 for Fecal Coliform bacteria (2002 IR).

EPA approved (8/2/2006) TMDL for Fecal Coliform [VAT-C07E-10, 31204].

Southwest Branch - Back River

Recreation

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 1.355

Sources:

Source Unknown

Final 2008 Page 1796 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C07E-10-SF Upper Back Creek

Location: This cause encompasses upper Back Creek. CBP segment MOBPH. Portion of DSS shellfish condemnation # 053-151A

(effective 2004-06-02).

City / County: York Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 4A

The Shellfishing Use is not supporting due to DSS Shellfish condemnation # 053-151 A (effective 20051103). 1998 CD segment for shellfish (Attachment A, Category 3) VAT-C07E-10. Previously (2006) TMDL-ID = VAT-C07E-10. Contained in TMDL for Poquoson River (25403) VAT-C07E-11-SF.

Upper Back Creek

Shellfishing

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.222

Sources:

Source Unknown

Final 2008 Page 1797 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C07E-11-SF

Poquoson River - Upper

Location: This cause encompasses from Pilney Point Estates downstream to end of Calthrop Neck. CBP Segment MOBPH. Portion of DSS shellfish condemn # 053-137 C (20060310).

City / County: York Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 4A

Fecal Coliform / 5B

The Shellfishing Use is not supporting due to DSS Shellfish condemnation # 053-137 C (effective 20060310) . Including Moores & Quarter March Creeks.

1998 CD segment for shellfish (Attachment A, Category 3) VAT-C07E-11. Not included within TMDL for Poquoson River, VAT-C07E-11-SF (25403) EPA approved 8/2/2006.

Poquoson River - Upper

Shellfishing

Estuary (Sq. Miles)

Reservoir (Acres)

River (Miles)

Fecal Coliform - Total Impaired Size by Water Type:

0.517

Sources:

Source Unknown

Final 2008 Page 1798 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C07E-12-SF

Front Cove - Upper

Location: This cause encompasses this north shore trib. to mainstem Back R. Adjacent to Messick Point. DSS shellfish condemnation # 054-021A (effective 2006-10-19). CBP Segment MOBPH.

City / County: Poquoson City City

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 4A

The Shellfishing Use is not supporting due to DSS Shellfish condemnation # 054-021A (Effective 2004-06-02). Listed in 2004 IR under previous condemnation # 193 (Effective 1998-06-24).

1998 CD segment for shellfish (Attachment A, Category 3) VAT-C07E-12.

EPA TMDL-ID should be approved for VAT-C07E-12-SF (may have been mistakenly listed as VAT-C07E-25-SF on EPA snapshot of Sept. 2007).

Front Cove - Upper Estuary Reservoir
Shellfishing (Sq. Miles) (Acres)

Fecal Coliform - Total Impaired Size by Water Type: 0.042

River

(Miles)

Sources:

Source Unknown

Final 2008 Page 1799 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C07E-14-SF

Harris River - Upper

Location: This cause encompasses this south shore trib. to mainstem Back R. Adjacent to Fox Hill area. DSS shellfish condemnation # 054-215A (effective 2005-10-31). CBP Segment MOBPH.

City / County: Hampton City

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 4A

The Shellfishing Use is not supporting due to DSS Shellfish condemnation # 054-215A (effective 2005-10-31). 1998 CD segment for shellfish (Attachment A, Category 3) VAT-C07E-14. Covered under TMDL ID VAT-C07E-14-SF (31210), Harris River (Back River), EPA approved 8/2/2006.

Harris River - Upper

Shellfishing

Estuary (Sq. Miles)

Reservoir (Acres)

River (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.410

Sources:

Source Unknown

Final 2008 Page 1800 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C07E-15-SF

DSS Inlet #1 - Unnamed Inlet at Mouth of SW Branch

Location: This cause encompasses this south shore trib. to mainstem Back R.Located east of mouth of SW Branch. CBP Segment MOBPH. DSS shellfish harvesting condemnation # 054-021 C (effective 20061019).

City / County: Hampton City

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 4A

The Shellfishing Use is not supporting due to DSS Shellfish condemnation # 054-021 C (effective 20061019).1998 CD segment for shellfish (Attachment A, Category 3) VAT-C07E-15.

EPA approved (8/2/2006) TMDL for VAT-C07E-15-SF [31209]. Covered under TMDL ID VAT-C07E-15-SF (31209), Inlet (Back River), EPA approved 8/2/2006.

DSS Inlet #1 - Unnamed Inlet at Mouth of SW Branch

Estuary (Sq. Miles)

Reservoir (Acres)

River (Miles)

Fecal Coliform - Total Impaired Size by Water Type:

0.025

Sources:

Shellfishing

Source Unknown

Final 2008 Page 1801 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C07E-16-SF

Wallace Creek - Lower (Back River)

Location: This cause encompasses this tributary to south shore Back River, east of Harris R & adjacent to Inlet #2. CBP segment MOBPH. DSS shellfish condemnation # 054-215 C (effective 20051031).

City / County: Hampton City

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 4A

The Shellfishing Use is not supporting due to DSS Shellfish condemnation # 054-215 C (effective 20051031). Previously (2006 IR) listed as TMDL-ID: VAT-C07E-16. 1998 CD segment for shellfish (Attachment A, Category 3) VAT-C07E-16 . EPA approved (8/2/2006) TMDL for VAT-C07E-16-SF [31208]. Covered under TMDL ID VAT-C07E-16-SF (31208), Wallace Creek (Back River), EPA approved 8/2/2006.

Wallace Creek - Lower (Back River)

Estuary (Sq. Miles) Reservoir (Acres)

River

Fecal Coliform - Total Impaired Size by Water Type:

0.062

(Miles)

Sources:

Shellfishing

Source Unknown

Final 2008 Page 1802 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C07E-19-SF

Tabbs Creek - Back River

Location: This cause encompasses this tributary to Northwest Branch Back River, entirety of creek. CBP segment MOBPH. Portion of DSS shellfish condemnation # 054-021 E (effective 20061019).

City / County: Poquoson City City

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 4A

The Shellfishing Use is not supporting due to DSS Shellfish condemnation # 054-021 E (effective 20061019) Previously ID as portion of DSS shellfish condemnation # 054-021D. EPA approved (8/2/2006) TMDL for VAT-C07E-19-SF [31206]. Covered under TMDL ID VAT-C07E-19-SF (31206), Tabbs Creek (Back River), EPA approved 8/2/2006.

Tabbs Creek - Back River

Shellfishing

Estuary (Sq. Miles)

Reservoir (Acres)

River (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.104

Sources:

Source Unknown

Final 2008 Page 1803 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C07E-20-SF

DSS Inlet #2 - Unnamed Inlet S. Shore of Back River

Location: This cause encompasses this south shore trib. to mainstem Back R.Located in unnamed inlet west of Dandy Point. On south shore of Back River, southwest of mouth and east of Harris R. DSS condemnation # 054-215B (effective 2005-10-31). CBP Segment MOBPH.

City / County: Hampton City

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

The Shellfishing Use is not supporting due to DSS Shellfish condemnation # 054-215B (effective 2005-10-31). Not covered under TMDL ID VAT-C07E-15-SF (31209), Inlet (Back River), EPA approved 8/2/2006.

DSS Inlet #2 - Unnamed Inlet S. Shore of Back River

Estuary (Sq. Miles)

Reservoir (Acres)

River (Miles)

Fecal Coliform - Total Impaired Size by Water Type:

0.005

Sources:

Shellfishing

Source Unknown

Final 2008 Page 1804 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C07E-21-SF

Cedar & Topping Creeks and Northwest Br. Back River - Upper

Location: This cause encompasses these tidal streams located near City of Poquoson. Cedar & Topping Creeks are tribs to the north shore of the Northwest Branch of Back River. Portion of DSS condemnation # 054-021B (less NW Br Back R./Brick Kiln Cr. portion) effective 2006-10-19. CBP Segment MOBPH.

City / County: Hampton City Poquoson City City

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 4A

The Shellfishing Use is not supporting due to DSS Shellfish condemnation # 054-021C (less NW Br Back R./Brick Kiln Cr. Portion). VAT-C07E-17 (DSS# 21) merged into VAT-C07E-21 (DSS# 054-021C) effective 2004-06-02.

1998 CD segment for shellfish (Attachment A, Category 3) VAT-C07E-17. EPA approved (8/2/2006) TMDL for VAT-C07E-21-SF [31201]. Covered under TMDL ID VAT-C07E-21-SF (31201), Back River, Northwest Branch, EPA approved 8/2/2006.

Cedar & Topping Creeks and Northwest Br. Back River - Upper **Shellfishing**

Estuary (Sq. Miles)

Reservoir (Acres)

River (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.328

Sources:

Source Unknown

Final 2008 Page 1805 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C07E-22-SF

Newmarket Creek and Southwest Branch - Back River

Location: This cause encompasses this tributary to the Southwest Branch Back River, south of Blue Bird Gap Farm area. From the I-64 crossing (RM 3.68) downstream to confluence with SW Br. Back R. CBP Segment MOBPH. Portion of DSS shellfish condemnation # 054-021 C (effective 2006-10-19).

City / County: Hampton City

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 4A

The Shellfishing Use is not supporting due to DSS Shellfish condemnation # 054-021 C (effective 2006-10-19). Previously listed (2006 IR) under TMDL-ID: VAT-C07E-22. Covered under TMDL ID VAT-C07E-22-SF (33839), Back River, Southwest Branch, EPA approved 8/2/2006

Newmarket Creek and Southwest Branch - Back River

Shellfishing

(Sq. Miles)

Estuary

Reservoir (Acres)

River (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 1.507

Sources:

Discharges from Municipal Separate Storm Sewer

Systems (MS4)

Source Unknown

Final 2008 Page 1806 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C07E-23-SF Boathouse Creek

Location: This cause encompasses this tributary to the Poquoson River from end of tidal waters downstream to confluence with

Chisman Cr. CBP Segment MOBPH. DSS condemnation # 053-221C (effective 2006-03-10).

City / County: York Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

The Shellfishing Use is not supporting due to DSS Shellfish condemnation # 053-221C (effective 2006-03-10).

Boathouse Creek

Shellfishing

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.061

Sources:

Source Unknown

Final 2008 Page 1807 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C07E-24-SF

Unnamed Cove @ Crane & Adjacent Mouth Patricks Cr. And Upper Hodges Creek

Location: This cause encompasses this tributary to the north shore tributary to Poquoson R (incl. area adjacent to mouth of patricks Cr.) at Crane. CBP Segment MOBPH. Portion of DSS shellfish condemnation # 053-137 B (effective 20060310).

City / County: York Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 4A

Fecal Coliform / 5B

The Shellfishing Use is not supporting due to DSS Shellfish condemnation #053-137 B (effective 20060310). Included within TMDL for Poquoson River, VAT-C07E-11-SF (25403) EPA approved 8/2/2006.

Unnamed Cove @ Crane & Adjacent Mouth Patricks Cr. And Upper Hodges Creek

Estuary (Sq. Miles)

Reservoir (Acres)

River (Miles)

Fecal Coliform - Total Impaired Size by Water Type:

0.101

Sources:

Shellfishing

Source Unknown

Final 2008 Page 1808 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C07E-25-SF

Lyons Creek - Upper

Location: This cause encompasses this south shore tributary to Poquoson R, in area of York Haven Anchorage. East of Roberts Cr. and north of White House Cove. CBP Segment MOBPH. Portion of DSS Shellfish condemnation # 053-222 B (effective

River

(Miles)

(Sq. Miles)

(Acres)

2006-03-10).

City / County: Poquoson City City

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

The Shellfishing Use is not supporting due to DSS Shellfish condemnation #053-137 E (effective 2004-04-26).

Lyons Creek - Upper **Estuary** Reservoir

Fecal Coliform - Total Impaired Size by Water Type: 0.070

Sources:

Shellfishing

Source Unknown

Final 2008 Page 1809 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C07E-26-SF

Bennett Creek, Easton Cove and Floyds Bay

Location: This cause encompasses Bennett Creek, Easton Cove and Floyds Bay. CBP Segment MOBPH. Portion of DSS shellfish condemn # 053-222D (effective 2006-03-10).

City / County: Poquoson City City

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

The Shellfishing Use is not supporting due to DSS Shellfish condemnation # 053-151A (Effective 2004 IR = 2001-04-30 & for 2006 IR = 2005-11-03).

Bennett Creek, Easton Cove and Floyds Bay

n Cove and Floyds Bay Estuary (Sq. Miles

(Sq. Miles) (Acres) (Miles)

Reservoir

River

Fecal Coliform - Total Impaired Size by Water Type: 0.213

Sources:

Shellfishing

Source Unknown

Final 2008 Page 1810 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C07E-29-BAC **Chisman & Goose Creeks**

Location: This cause encompasses Chisman & Goose Creeks. CBP Segment MOBPH. DSS condemnation # 053-137A (effective

2004-04-26).

City / County: Poquoson City City

Use(s): Recreation

Cause(s) /

VA Category: Enterococcus / 4A Enterococcus / 5A

The Recreation Use is impaired (3 violates / 24 obs.) due to exceedance of the instantaneous criteria for Enterococcus

bacteria. Data is from the downstream DEQ station @ 7-CHS000.84.

Chisman & Goose Creeks Estuary Reservoir River (Miles)

(Sq. Miles) (Acres) Recreation

Enterococcus - Total Impaired Size by Water Type: 1.055

Sources:

Source Unknown

Final 2008 Page 1811 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C07E-30-SF

Cabin Creek - Upper

Location: This cause encompasses Cabin Creek's upstream portion (N of Poquoson R mouth) tributary to Poquoson River. From end of tidal waters downstream approx. 1/2 creek's length. CBP Segment MOBPH. DSS shellfish condemn # 053-137A (effective 2006-03-10).

City / County: York Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

The Shellfishing Use is not supporting due to DSS Shellfish condemnation # 053-137A (effective 2006-03-10).

Cabin Creek - Upper Estuary Reservoir River
Shellfishing (Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.048

Sources:

Source Unknown

Final 2008 Page 1812 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C07E-31-SF

Southwest Branch, Back River and Watts Creek

Location: This cause encompasses the Southwest Branch, Back River and Watts Creek from Langley View downstream to confluence with mainstem back R. CBP segment MOBPH. portion of DSS shellfish condemnation # 054-021E (effective 2004-06-02).

City / County: Hampton City Poquoson City City

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

The Shellfishing Use is not supporting due to DSS Shellfish condemnation #054-021E (effective 2004-06-02).

Southwest Branch, Back River and Watts Creek

Shellfishing

Estuary (Sq. Miles)

Reservoir (Acres)

River (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.303

Sources:

Source Unknown

Final 2008 Page 1813 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C07E-32-SF

Chisman Creek-Upper & Goose Cr

Location: This cause encompasses this tributary to the Poquoson River from end of tidal waters (upper 2/3 of creek), downstream to area of Evergreen Shores (approx. RM 0.9). CBP Segment MOBPH. DSS condemnation # 053-137A (effective 2004-04-26).

City / County: Poquoson City City

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 4A

The Shellfishing Use is not supporting due to DSS Shellfish condemnation # 053-137A (effective 2004-04-26). Previously (2006 IR) listed as TMDL-ID: VAT-C07E-23.

For 2008 IR DSS re-assigned to # 053-221B (effective 2006-03-10) from 2006-IR DSS shellfish condemnation # 053-137A (effective 2004-04-26). Covered under TMDL ID VAT-C07E-23-SF (25405), Chisman Creek (Poqouson River), EPA approved 8/2/2006.

1998 CD segment for shellfish (Attachment A, Category 3) VAT-C07E-23 . Covered under TMDL ID VAT-C07E-23-SF (25405), Chisman Creek (Poquuson River), EPA approved 8/2/2006.

Chisman Creek-Upper & Goose Cr

Estuary (Sq. Miles)

0.560

Reservoir (Acres)

River (Miles)

Fecal Coliform - Total Impaired Size by Water Type:

Sources:

Shellfishing

Source Unknown

Final 2008 Page 1814 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C07E-33-SF

Northwest Br. Back River - Upper

Location: This cause encompasses the upper Northwest Branch Back River from confluence of Cedar Creek downstream to confluence Tabbs Cr. Portion DSS shellfish condemnation # 054-021B (less Cedar/Topping & Brick Kiln Creeks, effective 2006-10-19). CBP Segment MOBPH.

City / County: Hampton City Poquoson City City

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

The Shellfishing Use is not supporting due to DSS Shellfish condemnation #054-021B (less Cedar/Topping & Brick Kiln Creeks, effective 2006-10-19). Not covered under TMDL ID VAT-C07E-21-SF (31201), Back River, Northwest Branch, EPA approved 8/2/2006.

Northwest Br. Back River - Upper

Estuary (Sq. Miles)

0.261

Reservoir (Acres)

River (Miles)

Fecal Coliform - Total Impaired Size by Water Type:

Sources:

Shellfishing

Source Unknown

Final 2008 Page 1815 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C07L-01-CU Harwood Mills Reservoir

Location: This cause encompasses the Harwood Mills Reservoir, portion of Poquoson River upstream of dam @ RM 5.7. PWS for

York County.

City / County: York Co.

Use(s): Aquatic Life Wildlife

Cause(s) /

VA Category: Copper / 5A

The Aquatic Life and Wildlife Uses impairments are related to the Aquatic Life impairment, and is carried from 2004 IR, due to water column copper exceedances of the acute criteria. Data supplied by USGS @ Station 01677850 - surface layer in September 2002. Exceedance of Cu freshwater acute criteria at violation rate of 100% (3 violates / 3 surface obs.).

Harwood Mills Reservoir Estuary Reservoir River (Sq. Miles) (Acres) (Miles)

Copper - Total Impaired Size by Water Type: 515.36

Sources:

Municipal (Urbanized High Source Unknown

Density Area)

Final 2008 Page 1816 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C07L-01-DO Harwood Mills Reservoir

Location: This cause encompasses the Harwood Mills Reservoir, portion of Poquoson River upstream of dam @ RM 5.7. PWS for

York County.

City / County: York Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5A

The Aquatic Life impairment is carried from 2004 IR, due to site specific dissolved oxygen concentrations below the minimum criteria (4.0 mg/L). The DO impaired pooled violation rate (29/88 = 33%) Individual station violation rates (7-POQ005.72 @ 16/45, 7-POQ006.84 @ 6/29, 01677850 @ 6/12, 01677832 @ 1/2).

Harwood Mills Reservoir

Aquatic Life

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Oxygen, Dissolved - Total Impaired Size by Water Type: 257.68

Sources:

Residential Districts Source Unknown

Final 2008 Page 1817 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C07R-01-DO

Newmarket Creek - Lower Riverine

Location: This cause encompasses Newmarket Creek from 0.1 mi. below Chestnut Ave. downstream to 0.65 mi. below Aberdeen Rd. crossing. Lowermost riverine portion, prior to start of tidal influence. In area of Mount Olive Cemetery.

City / County: Hampton City

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5A

The Aquatic Life impairment is carried from 2004 IR, due to site specific dissolved oxygen concentrations (3 violates / 8 obs.) below the minimum criteria (4.0 mg/L). Possibly related to downstream DO impairment (TMDL_ID VAT-C07E-03). Monitoring at DEQ (AQM) station @ 7-NEW005.44 outside 2008 IR data window (1/1/2001-12/31/2006). Within area of dense residential and commercial development.

Newmarket Creek - Lower Riverine

Estuary (Sq. Miles) Reservoir (Acres)

River (Miles)

Oxygen, Dissolved - Total Impaired Size by Water Type:

1.98

Sources:

Aquatic Life

Municipal (Urbanized High

Source Unknown

Density Area)

Final 2008 Page 1818 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C07R-02-BAC **Newmarket Creek - Lower Riverine**

Location: This cause encompasses Newmarket Creek from 0.1 mi. below Chestnut Ave. downstream to 0.65 mi. below Aberdeen Rd. crossing. Lowermost riverine portion, prior to start of tidal influence. In area of Mount Olive Cemetery.

City / County: Hampton City

Use(s): Recreation

Cause(s) /

VA Category: Fecal Coliform / 4A

The Recreation Use is impaired due to exceedance (6 violates / 8 obs.) of the fecal coliform bacteria criteria. The Recreation Use is impaired due to exceedance of the fecal coliform bacteria criteria. Previously (2006 IR) ID as VAT-C07E-02. Monitoring at DEQ (AQM) station @ 7-NEW005.44 outside 2008 IR data window (1/1/2001-12/31/2006). Probably related to downstream fecal coliform impairment (TMDL_ID VAT-C07E-03).

Newmarket Creek - Lower Riverine

Estuary Reservoir (Sq. Miles) (Acres) Recreation

> Fecal Coliform - Total Impaired Size by Water Type: 1.98

River

(Miles)

Sources:

Source Unknown

Final 2008 Page 1819 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C08E-01-EBEN Lynnhaven River - Mainstem

Location: This cause encompasses the entirety of the Lynnhaven River CBP-BIBI segment LYNPHa and Tributaries. Tributary to shouth shore of Chesapeake Bay. Mainstem area near mouth. CBP segment LYNPH. BIBI segment LYNPHa.

City / County: Virginia Beach City

Use(s): Aquatic Life

Cause(s) /

VA Category: Estuarine Bioassessments / 5A

The Aquatic Life Use is impaired based on failure to meet a statistical evaluation constituting an un-impacted benthic organism population per CBP (Benthic-BIBI) analysis. The source/stressor tool identified sediment contaminants as source for the impairment.

Lynnhaven River - Mainstem

Estuary Reservoir River

Aquatic Life (Sq. Miles) (Acres) (Miles)

Estuarine Bioassessments - Total Impaired Size by Water Type: 7.881

Sources:

Contaminated Sediments Source Unknown

Final 2008 Page 1820 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C08E-01-PCB Lynnhaven River System VDH Fish Consumption Advisory

Location: This cause encompasses the complete Lynnhaven River System

Norfolk City Virginia Beach City City / County: Accomack Co.

Use(s): Fish Consumption

Cause(s) /

VA Category: PCB in Fish Tissue / 5A

The Fish Consumption Use is impaired based on the VDH fish consumption advisory for PCBs for the Eastern Branch Lynnhaven River issued 12/13/04. Previously (2006 IR) listed as TMDL-ID: VDH-Bay PCBs.

Lynnhaven River System VDH Fish Consumption Advisory

Fish Consumption

Estuary (Sq. Miles) PCB in Fish Tissue - Total Impaired Size by Water Type: 10.706

Reservoir (Acres)

River (Miles)

Sources:

Source Unknown

Final 2008 Page 1821 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C08E-05-BAC

Thalia Creek, Thurston Branch, Buchanan Creek, London Bridge Creek and Western Branch, Lynnhaven River

Location: This cause encompasses from the headwaters downstream to Witch Duck Point. Portion of CBP segment LYNPH. Portion of DSS shellfish direct harvesting condemnation #071-025 A (effective 2000905, balance in VAT-C08E_EBL01A00,

_LYN01A00).

City / County: Virginia Beach City

Use(s): Recreation

Cause(s) /

VA Category: Enterococcus / 4A

The Recreation Use is impaired due to exceedance at station 7-WES001.68 (8 violates / 50 obs.), 7-WES002.58 (8 violates / 25 obs.), 7-LOB001.79 (20 violates / 27 obs.), 7-THA000.76 (24 violates / 26 obs.) of the criteria for Enterococcus bacteria. Previously (2006 IR) User Flag ID as VAT-C08E-04.

A TMDL for Shellfishing Use has been completed and EPA approved in 2005 (VAT-C08E-13) which includes the Recreation Use under TMDL ID VAT-C08E-04.

1998 CD segment for FC (Attachment A, Category 1, Part 1) VAT-C08E-04.

Thalia Creek, Thurston Branch, Buchanan Creek, London Bridge Creek and Western Branch, Lynnhaven River

Estuary (Sq. Miles)

Reservoir (Acres)

River (Miles)

Recreation

Enterococcus - Total Impaired Size by Water Type: 0.616

Sources:

Source Unknown

Final 2008 Page 1822 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C08E-06-BAC E

Eastern Branch - Upper, Lynnhaven River

Location: This cause encompasses from the end of London Bridge Creek (Rt 58 crossing) downstream to eastern shore embayment near Forest Hills. Portion of CBP segment LYNPH.Portion of DSS # 071-025 A (effective 20060905, balance in VAT-C08E _WES, LYN).

City / County: Virginia Beach City

Use(s): Recreation

Cause(s) /

VA Category: Enterococcus / 4A

The Recreation Use is impaired due to exceedance at stations 7-EBL001.15 (3 violates / 25 obs.) and 7-EBL002.54 (7 violates / 25 obs.) of the criteria for Enterococcus bacteria. Previously (2006 IR) User Flag ID as VAT-C08E-06.

A TMDL for Shellfishing Use has been completed and EPA approved in 2004 (VAT-C08E-13) which includes the Recreation Use under TMDL ID VAT-C08E-06.

Eastern Branch - Upper, Lynnhaven River

Recreation

Estuary (Sq. Miles)

Reservoir (Acres)

River (Miles)

Enterococcus - Total Impaired Size by Water Type: 0.578

Sources:

Source Unknown

Final 2008 Page 1823 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C08E-07-BAC We

West Neck Creek (Upper) and Canal No. 2

Location: From Princess Anne Rd. crossing downstream to junction with London Bridge Cr. at Shipps Corner area. Segment has been determined by USGS to drain to C08E (Lynnhaven River). Portion of CBP segment LYNPH.No DSS shellfish direct harvesting condemnation.

City / County: Virginia Beach City

Use(s): Recreation

Cause(s) /

VA Category: Enterococcus / 4A

The Recreation Use is impaired due to exceedance at station 5BWNC010.02 (22 violates / 31 obs.) of the criteria for Enterococcus bacteria. Previously (2006 IR) User Flag ID as VAT-C08E-07.

A TMDL for Fecal Coliform bacteria has been completed and EPA approved in 2005 (VAT-C08E-07) which includes the Recreation Use under TMDL ID VAT-C08E-07.

1998 CD segment for FC (Attachment A, Category 1, Part 1) VAT-C08E-04.

West Neck Creek (Upper) and Canal No. 2

Recreation

Estuary (Sq. Miles)

Reservoir (Acres)

River (Miles)

Enterococcus - Total Impaired Size by Water Type: 0.109

Sources:

Source Unknown

Final 2008 Page 1824 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C08E-11-SF

Broad Bay, Linkhorn Bay, Crystal Lake, Dey Cove/Mill Dam Creek and Long & Little Neck Creeks

Location: East of Lynnhaven River. Broad Bay area adjacent Bay Island area. Portion of CBP segment LYNPH. Portion of DSS shellfish direct harvesting condemnation # 071-025 A (effective 20060905).

City / County: Virginia Beach City

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 4A

The Shellfishing Use is not supporting due to DSS shellfish direct harvesting condemnation #071-025 B (effective 20060524) (balance in VAT-C08E_DEY01A00, _LKN01A00 & _CRY01A00). Previous (2006 IR) DSS IDas condemnation #071-025 C. TMDL completed and EPA approved (3/22/2004) which included VAT-C08E-12. Previously (2006 IR) listed as TMDL-ID: VAT-C08E-12.

A TMDL for Shellfishing Use has been completed and EPA approved (VAT-C08E-11) in 2004 which includes VAT-C08E-12. 1998 CD segment for shellfish (Attachment A, Category 3) VAT-C08E-12.

Broad Bay, Linkhorn Bay, Crystal Lake, Dey Cove/Mill Dam Creek and Long & Little Neck Creeks

Estuary (Sq. Miles)

Reservoir (Acres)

River (Miles)

Shellfishing

Fecal Coliform - Total Impaired Size by Water Type: 2.164

Sources:

Discharges from Municipal Separate Storm Sewer Systems (MS4)

On-site Treatment Systems (Septic Systems and Similar Decentralized Systems) Municipal (Urbanized High Density Area)

Natural Sources

Non-Point Source

Final 2008 Page 1825 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C08E-13-SF

Lynnhaven River System

Location: This cause encompasses from the headwaters of the Lynnhaven River System downstream to the confluence with the Chesapeake Bay. Portion of CBP segment LYNPH.Portion of DSS # 071-025 A (effective 20060905, balance in VAT-C08E

_WES, LYN).

City / County: Virginia Beach City

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 4A

The Shellfishing Use is not supporting due to DSS shellfish direct harvesting condemnation #071-025 A (balance in VAT-C08E_LYN01A06 & WES01A00). A TMDL for Shellfishing Use has been completed and EPA approved in 2004 which includes

VAT-C08E-13.

1998 CD segment for shellfish (Attachment A, Category 3) VAT-C08E-13.

Lynnhaven River System

Shellfishing

Estuary (Sq. Miles) Reservoir (Acres)

River (Miles)

Fecal Coliform - Total Impaired Size by Water Type:

4.721

Sources:

Discharges from Municipal Separate Storm Sewer Systems (MS4)

On-site Treatment Systems (Septic Systems and Similar Decentralized Systems)

Municipal (Urbanized High Density Area)

Natural Sources

Non-Point Source

Final 2008 Page 1826 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C08L-01-DO Lake Whitehurst

Location: This cause encompasses the entirety of Lake Whitehurst, from Rt. 60 south to the border of Norfolk Intl Airport. City of

Norfolk PWS.

City / County: Norfolk City

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5A

The Aquatic Life impairment is due to dissolved oxygen concentrations below the DEQ minimum criteria (4.0 mg/L)) as

assessed from pooled observations.

Lake Whitehurst Estuary Reservoir River Aquatic Life (Sq. Miles) (Acres) (Miles)

Oxygen, Dissolved - Total Impaired Size by Water Type: 494.93

Sources:

Residential Districts Source Unknown

Final 2008 Page 1827 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C08L-01-HG Lake Whitehurst

Location: This cause encompasses the entirety of Lake Whitehurst, from Rt. 60 south to the border of Norfolk Intl Airport. City of

Norfolk PWS.

City / County: Norfolk City

Use(s): Fish Consumption

Cause(s) /

VA Category: Mercury in Fish Tissue / 5A

The Fish Consumption Use is impaired based on the VDH fish consumption advisory for Mercury for Lake Whitehurst issued

2/13/04

Lake Whitehurst Estuary Reservoir River (Sq. Miles) (Acres) (Miles)

Mercury in Fish Tissue - Total Impaired Size by Water Type: 494.93

Sources:

Final 2008 Page 1828 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C08L-01-PCB Lake Whitehurst VDH Fish Consumption Advisory

Location: This cause encompasses the entirety of Lake Whitehurst, from Rt. 60 south to the border of Norfolk Intl Airport. City of

Norfolk PWS.

City / County: Norfolk City

Use(s): Fish Consumption

Cause(s) /

VA Category: PCB in Fish Tissue / 5A

The Fish Consumption Use is impaired based on the VDH fish consumption advisory for PCBs for Lake Whitehurst issued

12/13/04

Fish Consumption

Lake Whitehurst VDH Fish Consumption Advisory

Estuary (Sq. Miles)

Reservoir (Acres)

River (Miles)

PCB in Fish Tissue - Total Impaired Size by Water Type:

494.93

Sources:

Source Unknown

Final 2008 Page 1829 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C08L-03-DO

Little Creek Reservoir

Location: This cause encompasses the upper portion of the lake, begining at Rt 13 (RM 1.0) downstream to north, ends at lake terminus @ route 60 (RM 0.0). City of Norfolk PWS.

City / County: Virginia Beach City

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5A

The Aquatic Life Use impairment is based on dissolved oxygen concentrations below the minimum criteria (4.0 mg/L) as reported by observations pooled for 7-LTR000.04, 7-LTR000.95 and LC1 (11violates / 53 obs.) sampled during the current cycle. Individual station observations include 7-LTR000.04 (4 violates/ 21 obs.), 7-LTR000.95 (6 violates/ 20 obs.) and LC1 (1 violates/ 12 obs). The pH observations are supporting for the aquatic life use.

TSI Results [from 7-LTR000.04] All > 60 = Anthropogenic Source.

Little Creek Reservoir

Reservoir

Aquatic Life

Estuary

Reservoir

River

(Sq. Miles)

(Acres)

(Miles)

Oxygen, Dissolved - Total Impaired Size by Water Type: 199.79

Sources:

Residential Districts Source Unknown

Final 2008 Page 1830 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C08L-03-PCB L

Little Creek Reservoir VDH Fish Consumption Advisory

Location: This cause encompasses the upper portion of the lake, begining at Rt 13 (RM 1.0) downstream to north, ends at lake terminus @ route 60 (RM 0.0). City of Norfolk PWS.

City / County: Virginia Beach City

Use(s): Fish Consumption

Cause(s) /

VA Category: PCB in Fish Tissue / 5A

The Fish Consumption Use is impaired based on the VDH fish consumption advisory for PCBs for Little Creek Reservoir issued

12/13/04

Fish Consumption

Little Creek Reservoir VDH Fish Consumption Advisory

Estuary (Sq. Miles)

Reservoir (Acres)

River (Miles)

PCB in Fish Tissue - Total Impaired Size by Water Type:

199.79

Sources:

Source Unknown

Final 2008 Page 1831 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C08L-04-DO Lake Smith

Location: This cause encompasses the entirety of Lake Smith. City of Norfolk PWS.

City / County: Norfolk City Virginia Beach City

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5A

The Aquatic Life Use impairment is retained from the 2002 303d listing, due to dissolved oxygen concentration measurements below the minimum criteria (4.0 mg/L). Pooled stations inlcude 7-LAS00.06, 7-LAS001.03, 7-LAS001.44 and Norfolk's station SM1. Lake Smith's pooled DO violation rate is 32/73 = 43.8%. Individual station exceedances for DO inlcude 7-LAS00.06 (13/27), 7-LAS001.03 (10/17), 7-LAS001.44 (6/14) and Norfolk's station SM1 (3/15). Pooled pH data supported use with a lake violation rate of 1/73 = 1.4%.

This lake is non-stratified.

Lake Smith

Aquatic Life

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Oxygen, Dissolved - Total Impaired Size by Water Type: 184.89

Sources:

Source Unknown

Final 2008 Page 1832 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C08L-06-HG

Lake Trashmore - Western Pond VDH Fish Consumption Advisory for Mercury

Location: This cause encompasses the entirety of Lake Trashmore - Western Pond. Includes Western portion of dual ponds lake system, pond on eastern side of Mt. Trashmore is not included in VDH advisory.

City / County: Virginia Beach City

Use(s): Fish Consumption

Cause(s) /

VA Category: Mercury in Fish Tissue / 5A

The Fish Consumption Use is impaired based on the VDH fish consumption advisory (Carp and Largemouth Bass) for mercury in fish tissue contamination (issued 9/30/04 for Hg). DEQ (CORE) monitoring at 7-MTL000.20 for fish tissue results exceeded DEQ-SV for Hg

Lake Trashmore - Western Pond VDH Fish Consumption Advisory for Mercury

Estuary (Sq. Miles)

Reservoir (Acres)

River (Miles)

Mercury in Fish Tissue - Total Impaired Size by Water Type:

54.39

Sources:

Source Unknown

Fish Consumption

Final 2008 Page 1833 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C08L-06-PCB

Lake Trashmore - Western Pond VDH Fish Consumption Advisory for PCRs

Location: This cause encompasses the entirety of Lake Trashmore - Western Pond. Includes Western portion of dual ponds lake system, pond on eastern side of Mt. Trashmore is not included in VDH advisory.

City / County: Virginia Beach City

Use(s): Fish Consumption

Cause(s) /

VA Category: PCB in Fish Tissue / 5A

The Fish Consumption Use is impaired based on the VDH fish consumption ban (for Carp) and advisory (for Yellow Perch) for PCBs fish tissue contamination issued 12/13/04. DEQ (CORE) monitoring at 7-LAW001.00 for fish tissue results exceeded DEQ-SV for PCBs.

Lake Trashmore - Western Pond VDH Fish Consumption Advisory for PCBs

Estuary (Sq. Miles)

Reservoir (Acres)

River (Miles)

PCB in Fish Tissue - Total Impaired Size by Water Type:

54.39

Sources:

Source Unknown

Fish Consumption

Final 2008 Page 1834 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C09E-01-BAC Bulbeggar Creek

Location: This cause encompasses from the estuarine/riverine transition (end of tidal waters) downstream to mouth (confluence with Pocomoke Sound). Portion of CBP segment POCOH. Portion of DSS condemnation # 075-033 (effective 20011029).

City / County: Accomack Co.

Use(s): Recreation

Cause(s) /

VA Category: Enterococcus / 5A

The Recreation Use is impaired due to exceedance of the instantaneous criteria for Enterococcus bacteria at station 7-BLB004.63 (4 violate / 11 obs.).

Bulbeggar Creek

Estuary Reservoir River

(Sq. Miles) (Acres) (Miles)

Enterococcus - Total Impaired Size by Water Type: 0.134

Sources:

Source Unknown

Final 2008 Page 1835 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C09E-02-BAC Pocomoke River

Location: This cause encompasses from the VA/MD state line downstream to mouth (confluence with Pocomoke Sound) within VA. Portion of CBP segment POCOH. Portion of DSS condemnation # 075-033 (effective 2001-10-29).

City / County: Accomack Co.

Use(s): Recreation

Cause(s) /

VA Category: Enterococcus / 5A

The Recreation Use is impaired due to exceedance of the instantaneous criteria for Enterococcus bacteria at station 7-POC001.76 (10 violate / 21 obs.).

Pocomoke River

Estuary Reservoir River

(Sq. Miles) (Acres) (Miles)

Enterococcus - Total Impaired Size by Water Type: 0.207

Sources:

Source Unknown

Final 2008 Page 1836 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C09E-10-SF

Pocomoke River, Pocomoke Sound, Bulbeggar & Pitts Creeks and Holdens Creek

Location: This cause encompasses the estuarine portions of the following: Pocomoke River, Pocomoke Sound, Bulbeggar & Pitts Creeks and Holdens Creek. Within DSS shellfish direct harvesting condemnation # 075-033 (effective 20011029).

City / County: Accomack Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

The Shellfishing Use is not supporting due to DSS shellfish direct harvesting condemnation # 075-033 (effective 2001-10-29).

Pocomoke River, Pocomoke Sound, Bulbeggar & Pitts Creeks and Holdens Creek

Estuary (Sq. Miles)

Reservoir (Acres)

River

Fecal Coliform - Total Impaired Size by Water Type:

2.602

(Miles)

Sources:

Shellfishing

Source Unknown

Final 2008 Page 1837 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C09R-01-DO

Unnamed tributary to Pitts Creek

Location: This cause encompasses the riverine portion of this tributary to Pitts Creek. Includes unnamed tributary (south bank) of this unnamed tributary to Pitts Creek. Located northwest of New Church in Accomack County.

City / County: Accomack Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5A

The Aquatic Life Use is impaired due to low dissolved oxygen at station 7-XAE001.42 (8 violates / 39 obs.; VAT-C09R-01) which exceed the minimum criteria for this parameter.

1998 CD segment for DO (Attachment B) VAT-C09R-01.

Unnamed tributary to Pitts Creek

Estuary (Sq. Miles)

Reservoir (Acres)

River (Miles)

Oxygen, Dissolved - Total Impaired Size by Water Type:

6.89

Sources:

Aquatic Life

Source Unknown

Final 2008 Page 1838 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C09R-02-BAC Unnamed tributary to Pitts Creek

Location: This cause encompasses the riverine portion of this tributary to Pitts Creek. Includes unnamed tributary (south bank) of this unnamed tributary to Pitts Creek. Located northwest of New Church in Accomack County.

City / County: Accomack Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

The Recreation Use is impaired (8 violate / 27 obs.) at station 7-XAE001.42 due to exceedance of the instantaneous criteria for Ecoli bacteria. Previous (2006 IR) Use Flag ID = VAT-C09R-02.

For 2006 IR mistakenly coded as VAT-C09R-01, the FC parameter was not included in the CD (Attachment B).

Unnamed tributary to Pitts Creek

Estuary (Sq. Miles)

Reservoir (Acres)

River (Miles)

Escherichia coli - Total Impaired Size by Water Type:

6.89

Sources:

Recreation

Source Unknown

Final 2008 Page 1839 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C09R-02-PH

Unnamed tributary to Pitts Creek

Location: This cause encompasses the riverine portion of this tributary to Pitts Creek. Includes unnamed tributary (south bank) of this unnamed tributary to Pitts Creek. Located northwest of New Church in Accomack County.

City / County: Accomack Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: pH / 5A

The Aquatic Life Use is impaired due to low pH (8 violates / 39 obs.; VAT-C09R-02) concentrations at station 7-XAE001.42, which exceed the minimum criteria for this parameter.

Although pH impairment from 1998 303d was delisted iin the 2004 IR, more recent data indicates impairment and need to readd pH again as impairment to the TMDL listing.

Need to investigate if natural conditions (leaf litter/organic content) may be the cause of the low pH.

Unnamed tributary to Pitts Creek

Estuary (Sq. Miles)

Reservoir (Acres)

River (Miles)

pH - Total Impaired Size by Water Type:

6.89

Sources:

Aquatic Life

Source Unknown

Final 2008 Page 1840 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C10E-01-BAC Holdens Creek - Upper

Location: This cause encompasses the upper portion of Holdens Creek, from the confluence of Sandy Bottom Branch downstream to 0.5 mi downstream of station @ 7-HLD002.67. Portion of CBP segment POCOH. Portion of DSS condemnation # 075-033

(effective 20011029).

City / County: Accomack Co.

Use(s): Recreation

Cause(s) /

VA Category: Enterococcus / 5A

The Recreation Use is impaired due to exceedance of the instantaneous criteria for Enterococcus bacteria at station 7-HLD002.67 (18 violate / 23 obs.). Fecal Coliform indicator bacteria impairment no longer applies, replaced by Enterococcus criteria impairment since threshold of 12 observations reached, with TMDL due date same as original FC impairment. Previous Use ID = VAT-C10E-01.

Holdens Creek - Upper

Recreation

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Enterococcus - Total Impaired Size by Water Type: 0.034

Sources:

Source Unknown

Final 2008 Page 1841 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C10E-02-BAC Muddy Creek - Upper

Location: This cause encompasses the upper portion of Muddy Creek, from end of tidal waters downstream to Pettigrew Bend. Portion of CBP segment POCMH. DSS shellfish direct harvesting condemnation # 076-176 A (effective 20060804).

City / County: Accomack Co.

Use(s): Recreation

Cause(s) /

VA Category: Enterococcus / 5A

The Recreation Use is impaired due to exceedance of the instantaneous criteria for Enterococcus bacteria at station 7-MUD002.29 (3 violate / 15 obs.). Fecal Coliform indicator bacteria impairment no longer applies, replaced by Enterococcus criteria impairment since threshold of 12 observations reached, with TMDL due date same as original FC impairment. Previous Use ID (2006 IR) = VAT-C10E-02.

Muddy Creek - Upper Estuary Reservoir River (Sq. Miles) (Acres) (Miles)

Enterococcus - Total Impaired Size by Water Type: 0.213

Sources:

Source Unknown

Final 2008 Page 1842 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C10E-05-BAC Messongo Creek - Upper

Location: This cause encompasses the upper portion of Messongo Creek, from end of tidal waters downstream to 0.4 mi downstream of Rt 690 crossing. Portion of CBP segment POCMH. Upstream (PROHIBITION) portion of DSS shellfish direct harvesting condemnation # 076-167 B (effective 20010731).

City / County: Accomack Co.

Use(s): Recreation

Cause(s) /

VA Category: Fecal Coliform / 4A

The Recreation Use is impaired based on exceedance of the Fecal Coliform bacteria criteria, which is carried from previous data collected during the 1998 cycle of the 303d report. The impairment is part of the July 1999 EPA Consent Decree (Attachment C & Attachment A, Category 1, Part 2).

Previous (2006 IR) Use ID = VAT-C10E-05.

1998 CD segment for FC (Attachment B) & DO (Attachment A, Category 1, Part 2) VAT-C10E-05.

Messongo Creek - Upper Estuary Reservoir River Recreation (Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.052

Sources:

Source Unknown

Final 2008 Page 1843 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C10E-05-DO

Messongo Creek - Upper

Location: This cause encompasses the upper portion of Messongo Creek, from end of tidal waters downstream to 0.4 mi downstream of Rt 690 crossing. Portion of CBP segment POCMH. Upstream (PROHIBITION) portion of DSS shellfish direct harvesting condemnation # 076-167 B (effective 20010731).

City / County: Accomack Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5A

The Aquatic Life Use DO impairment (based on retention of the 1998 listing for exceedance of the dissolved oxygen instantaneous minimum criteria) previous to the CBP criteria established for Open-Water Aquatic Life Use is retained. The previous DO impairment (VAT-C10E-05) from site specific monitoring is carried from previous data collected during the 1998 cycle of the 303d report. The impairment is part of the July 1999 EPA Consent Decree (Attachment C & Attachment A, Category 1, Part 2). Previous Use ID (2006 IR) as TMDL ID: CB-POCMH. TMDL [VAT-C10E-05] EPA approved for DO [24492] 6/7/2006.

1998 CD segment for FC (Attachment B) & DO (Attachment A, Category 1, Part 2) VAT-C10E-05.

Messongo Creek - Upper Estuary Reservoir River (Sq. Miles) (Acres) (Miles) **Aquatic Life**

> Oxygen, Dissolved - Total Impaired Size by Water Type: 0.052

Sources:

Natural Conditions - Water Quality Standards Use Attainability Analyses

Needed

Source Unknown

Final 2008 Page 1844 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C10E-06-BAC Deep Creek

Location: This cause encompasses Deep Creek, from end of tidal waters downstream to mouth. Portion of CBP segment CB7PH.

DSS shellfish direct harvesting condemnation # 077-13C C (effective 20060626).

City / County: Accomack Co.

Use(s): Recreation

Cause(s) /

VA Category: Enterococcus / 5A

The Recreation Use is impaired (3 violate / 12 obs.) due to exceedance of the instantaneous criteria for Enterococcus bacteria. Recreation Use is assessed using data from the DEQ (AQM) station @ 7-DEP001.38. Previous Use ID (2006 IR) as TMDL ID: VAT-C10E-06.

Deep Creek
Recreation
Reservoir River
(Sq. Miles) (Acres) (Miles)

Enterococcus - Total Impaired Size by Water Type: 0.693

Sources:

Source Unknown

Final 2008 Page 1845 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C10E-07-BAC Hunting Creek

Location: This cause encompasses Hunting Creek, from end of tidal waters downstream to mouth. Portion of CBP segment POCMH. DSS (OPEN) shellfish direct harvesting condemnation # 077-138 (effective 20060626).

City / County: Accomack Co.

Use(s): Recreation

Cause(s) /

VA Category: Enterococcus / 5A

The Recreation Use is assessed using data from the upstream DEQ (AQM) station @ 7-HUN001.88. The Recreation Use is impaired based on exceedance of the Enterococcus bacteria criteria at statiion 7-HUN001.88 (9 violates / 25 obs.).

Hunting Creek

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Enterococcus - Total Impaired Size by Water Type: 0.842

Sources:

Source Unknown

Final 2008 Page 1846 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C10E-10-SF

Bagwell Creek and Dix Cove

Location: This cause encompasses the entirety of Bagwell Creek and Dix Cove. Portion of CBP segment POCMH. Portion of DSS shellfish direct harvesting condemnation # 077-138 A (effective 20060626).

City / County: Accomack Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

The Shellfishing Use is not supporting due to DSS shellfish direct harvesting condemnation # 077-138 A (effective 20060626).

Bagwell Creek and Dix Cove

Estuary Reservoir River

Shellfishing (Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.258

Sources:

Final 2008 Page 1847 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C10E-11-SF De

Deep Creek - Upper

Location: This cause encompasses the upper portion of Deep Creek, from end of tidal waters downstream to approx. RM 1.6 (adjacent to Town of Deep Creek). Portion of CBP segment CB7PH. DSS shellfish direct harvesting condemnation # 077-13C C (effective 20060626).

City / County: Accomack Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

The Shellfishing Use is not supporting due to DSS shellfish direct harvesting condemnation # 077-138 C (effective 20060626). May be related to Recreation impairment due to Enterococcus bacteria in this and downstream segment. Previous Use ID (2006 IR) as TMDL ID: VAT-C10E-11.

TMDL with HUN = VAT-C10E-10

Deep Creek - Upper Estuary Reservoir River
Shellfishing (Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.274

Sources:

Source Unknown

Final 2008 Page 1848 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C10E-12-SF

Guilford Creek - Upper

Location: This cause encompasses the upper portion of Guilford Creek, from end of tidal waters downstream to end of DSS condemnation. Portion of CBP segment POCMH. DSS shellfish condemnation # 076-176 B (effective 20060804).

City / County: Accomack Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 4A

Fecal Coliform / 5B

The Shellfishing Use is not supporting due to DSS shellfish direct harvesting condemnation # 076-176 B.

1998 CD segment for shellfish (Attachment A, Category 3) VAT-C10E-12.

Guilford Creek - Upper

Shellfishing

Estuary (Sq. Miles)

Reservoir (Acres)

River (Miles)

Fecal Coliform - Total Impaired Size by Water Type:

0.152

Sources:

Source Unknown

Final 2008 Page 1849 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C10E-13-SF

Starling Creek - Lower

Location: This cause encompasses the lower portion of Starling Creek, from end of DSS condemnation downstream to mouth. Portion of CBP segment POCMH. DSS shellfish direct harvesting condemnation # 075-118 A (effective 20061025).

City / County: Accomack Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

The Shellfishing Use is not supporting due to DSS shellfish direct harvesting condemnation # 075-118 A. Previous Use ID = VAT-C10E-13.

1998 CD segment for shellfish (Attachment A, Category 3) VAT-C10E-13.

Starling Creek - Lower

Shellfishing

(Sq. Miles) (Acres) (Miles)

Estuary

Reservoir

River

Fecal Coliform - Total Impaired Size by Water Type: 0.055

Sources:

Source Unknown

Final 2008 Page 1850 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C10E-15-SF

Young Creek - Upper

Location: This cause encompasses the upper portion of Young Creek, from end of tidal waters downstream to end of DSS condemnation. Portion of CBP segment POCMH. DSS shellfish direct harvesting condemnation # 076-176 C (effective 20060804).

City / County: Accomack Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 4A

Fecal Coliform / 5B

The Shellfishing Use is not supporting due to DSS shellfish direct harvesting condemnation # 076-167 A (effective 20010731). Previous Use ID (2006 IR) = VAT-C10E-15.

1998 CD segment for shellfish (Attachment A, Category 3) VAT-C10E-15.

Young Creek - Upper

Shellfishing

Estuary (Sq. Miles)

Reservoir (Acres)

River (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.093

Sources:

Source Unknown

Final 2008 Page 1851 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C10E-16-SF

Muddy Creek - Upper

Location: This cause encompasses the upper portion of Muddy Creek, from end of tidal waters downstream to Pettigrew Bend. Portion of CBP segment POCMH. DSS shellfish direct harvesting condemnation # 076-176 A (effective 20060804).

City / County: Accomack Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

The Shellfishing Use is not supporting due to DSS shellfish direct harvesting condemnation # 076-176 A (effective 20060804).

1998 CD segment for shellfish (Attachment A, Category 3) VAT-C10E-16.

Muddy Creek - Upper Estuary Reservoir River
Shellfishing (Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.213

Sources:

Source Unknown

Final 2008 Page 1852 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C10E-17-SF

Messongo Creek - Middle

Location: This cause encompasses the middle portion of Messongo Creek, from 0.4 mi downstream of Rt 690 crossing, downstream to end of DSS condemnation near Town of Belinda. Portion of CBP segment POCMH. Downstream portion of DSS condemnation # 076-167 B (effective 20010731).

City / County: Accomack Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 4A

Fecal Coliform / 5B

The Shellfishing Use is not supporting due to DSS shellfish direct harvesting condemnation # 076-167 A (effective 20010731). Previous Use ID (2006 IR) = VAT-C10E-17.

1998 CD segment for shellfish (Attachment A, Category 3) VAT-C10E-17.

Messongo Creek - Middle

Shellfishing

Estuary (Sq. Miles)

0.238

Reservoir (Acres)

River (Miles)

Fecal Coliform - Total Impaired Size by Water Type:

Sources:

Source Unknown

Final 2008 Page 1853 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C10E-18-SF Hunting Creek - Upper

Location: This cause encompasses the upper portion of Muddy Creek, from headwaters downstream to end of DSS condemnation (downstream of Town of Hopkins). Portion of CBP segment POCMH. Portion of DSS shellfish direct harvesting condemnation # 077-138 B (effective 20060626).

City / County: Accomack Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

The Shellfishing Use is not supporting due to DSS shellfish direct harvesting condemnation # 077-138 B (effective 20060626). Previous Use ID (2006 IR) as TMDL ID: VAT-C10E-18. May be related to Enterococci criteria exceedances in this segment.

1998 CD segment for shellfish (Attachment A, Category 3) VAT-C10E-18.

Hunting Creek - Upper Estuary Reservoir River
Shellfishing (Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.286

Sources:

Source Unknown

Final 2008 Page 1854 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C10R-01-BAC Unnamed tributary to Sandy Bottom Branch

Location: This cause encompasses the portion of this unnamed tributary to Sandy Bottom Branch, originating at outfall 001 of VPDES VA0004049 downstream to confluence with Sandy Bottom Branch (@ Rt 693 crossing).

City / County: Accomack Co.

Use(s): Recreation

Cause(s) /

VA Category: Fecal Coliform / 5A

The Recreatiion Use impairment previously reported is retained because monitoring for the current data cycle exhibits Observed Effects based on exceedances of the criteria for Ecoli bacteria (3 violates / 8 obs.). The previous impairment assessment TMDL due date (established due to elevated levels of Fecal Coliform bacteria for the 1996 303d report) is retained.

1998 CD segment for benthics & FC (Attachment A, Category 1, Part 1) VAT-C10R-01.

Unnamed tributary to Sandy Bottom Branch

Recreation

Estuary (Sq. Miles)

Reservoir (Acres)

River (Miles)

Fecal Coliform - Total Impaired Size by Water Type:

1.87

Sources:

Source Unknown

Final 2008 Page 1855 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C10R-01-BEN Unnamed tributary to Sandy Bottom Branch

Location: This cause encompasses the portion of this unnamed tributary to Sandy Bottom Branch, originating at outfall 001 of VPDES VA0004049 downstream to confluence with Sandy Bottom Branch (@ Rt 693 crossing).

City / County: Accomack Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

The Aquatic Life Use is impaired due to impacts to the stream's benthic population. Assessment is based on biological benthic monitoring noting MI [MI: S-01, F&S-03,04,06; VI: F-01, 05;S-02] at DEQ (BIO) station @ 7-SBB000.17.

1998 CD segment for benthics & FC (Attachment A, Category 1, Part 1) VAT-C10R-01.

Unnamed tributary to Sandy Bottom Branch

Estuary (Sq. Miles)

Reservoir (Acres)

River (Miles)

Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:

1.87

Sources:

Aquatic Life

Source Unknown

Final 2008 Page 1856 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C10R-02-BAC Sandy Bottom Branch

Location: This cause encompasses the entirety of Sandy Bottom Branch downstream to the confluence with Holdens Creek.

City / County: Accomack Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

The Recreatiion Use is impaired due to exceedance of the criteria for Ecoli bacteria (11 violates / 32 obs.).

Sandy Bottom Branch

Recreation

Reservoir River
(Sq. Miles) (Acres) (Miles)

Escherichia coli - Total Impaired Size by Water Type:

1.28

Sources:

Source Unknown

Final 2008 Page 1857 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C10R-02-BEN Sandy Bottom Branch

Location: This cause encompasses the entirety of Sandy Bottom Branch downstream to the confluence with Holdens Creek.

City / County: Accomack Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

The Aquatic Life and Wildlife Uses are impaired due to exceedance of the freshwater acute criteria for copper.

Sandy Bottom Branch

Estuary Reservoir River

Aquatic Life (Sq. Miles) (Acres) (Miles)

Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type: 1.28

Sources:

Source Unknown

Final 2008 Page 1858 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C10R-02-CU Sandy Bottom Branch

Location: This cause encompasses the entirety of Sandy Bottom Branch downstream to the confluence with Holdens Creek.

City / County: Accomack Co.

Use(s): Aquatic Life Wildlife

Cause(s) /

VA Category: Copper / 5A

The Aquatic Life and Wildlife Uses ares impaired due to exceedance of the freshwater acute criteria for copper. Freshwater acute criteria for copper exceeded in monitoring @ 7-SBB000.17 (2 violates / 5 obs., during 2000 & 2001).

Sandy Bottom Branch

Estuary Reservoir River

Wildlife (Sq. Miles) (Acres) (Miles)

Copper - Total Impaired Size by Water Type: 2.56

Sources:

Industrial Point Source Source Unknown

Discharge

Final 2008 Page 1859 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C10R-03-BEN Guilford Creek

Location: This cause encompasses Guilford Creek, from confluence of two branches west of Rt 316 downstream to Rt 658 crossing.

City / County: Accomack Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

The Aquatic Life Use is impaired due to impacts to the stream's benthic population. Assessment is based on biological benthic monitoring noting MI [MI: S&F 05,06] at DEQ (BIO) station @ 7-GLF003.77.

Guilford Creek

Estuary Reservoir River

Aquatic Life

(Sq. Miles) (Acres) (Miles)

(Sq. Miles) (Acres) (Miles)

Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type: 0.65

Sources:

Source Unknown

Final 2008 Page 1860 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C11E-04-BAC North Branch, Onancock Creek

Location: This cause encompasses the entirety of the North Branch, Onancock Creek. CBP segment CB7PH. DSS shellfish condemnation (PROHIBITION) # 081-013 F (effective 20061123).

City / County: Accomack Co.

Use(s): Recreation

Cause(s) /

VA Category: Enterococcus / 4A

The Recreation Use is impaired based on previous exceedance of the Fecal Coliform bacteria criteria (maximum of 8 violates / 12 obs, 2006 IR) and exceedance of the Enterococcus bacteria criteria (maximum of 3 violates / 3 obs), as well as exhibits Observed Effects due to unsufficient exceedance of Enterococcus bacteria criteria within a small data set (1 violates / 3 obs). Previous Use ID (2006 IR) as TMDL ID: VAT-C11E-04. Covered under TMDL ID VAT-C11E-04 (25414), North Branch, Onancock Creek, EPA approved 8/2/2006.

River

(Miles)

North Branch, Onancock Creek

Recreation

Estuary Reservoir (Sq. Miles) (Acres)

Enterococcus - Total Impaired Size by Water Type: 0.021

Sources:

Source Unknown

Final 2008 Page 1861 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C11E-05-BAC Central Branch, Onancock Creek

Location: This cause encompasses the entirety of the Central Branch, Onancock Creek. CBP segment CB7PH. Portion of DSS shellfish condemnation # 081-013 B (effective 20061123).

City / County: Accomack Co.

Use(s): Recreation

Cause(s) /

VA Category: Enterococcus / 4A

The Recreation Use impairment is retained from the 2006 IR based on previous exceedance of the Fecal Coliform bacteria criteria and exhibits Observed Effects due to unsufficient exceedance of Enterococcus bacteria criteria within a small data set (1 violate / 3 obs.). Previous Use ID (2006 IR) = VAT-C11E-05. Recreation Use included under shellfish TMDL approved 8/2/06 under TMDL ID = VAT-C11E-05-SF(31239).

Central Branch, Onancock Creek

Estuary (Sq. Miles) Recreation

> Enterococcus - Total Impaired Size by Water Type: 0.018

Reservoir

(Acres)

River

(Miles)

Sources:

Final 2008 Page 1862 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C11E-06-BAC Southern Branch, Onancock Creek

Location: This cause encompasses the entirety of the Southern Branch, Onancock Creek. CBP segment CB7PH. Portion of DSS shellfish condemnation # 081-013 B (effective 20061123).

City / County: Accomack Co.

Use(s): Recreation

Cause(s) /

VA Category: Enterococcus / 4A

The Recreation Use impairment is retained from the 2006 IR based on previous exceedance of the Fecal Coliform bacteria criteria and exhibits Observed Effects due to unsufficient exceedance of Enterococcus bacteria criteria within a small data set (1 violate / 3 obs.). Previous Use ID (2006 IR) = VAT-C11E-06. Recreation Use included under shellfish TMDL approved 8/2/06 under TMDL ID = VAT-C11E-06 (24497).

Southern Branch, Onancock Creek

Estuary (Sq. Miles)

Reservoir (Acres)

River (Miles)

Enterococcus - Total Impaired Size by Water Type:

0.058

(Miles)

Sources:

Recreation

Final 2008 Page 1863 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C11E-07-BAC Onancock Creek Mainstem - Upper

Location: This cause encompasses the Onancock Creek mainstem, from junction of North, Central & South Branches downstream to the end of the DSS condemnation (RM 3.6) midway between Leatherberry and Cedar Crs. CBP segment CB7PH. Portion of DSS shellfish condemnation # 081-013 B (effective 20061123).

City / County: Accomack Co.

Use(s): Recreation

Cause(s) /

VA Category: Enterococcus / 4A

The Recreation Use is impaired (5 violate / 27 obs.) due to exceedance of the instantaneous criteria for Enterococci bacteria at station 7-OCN004.96. Previous Use ID (2006 IR) = VAT-C11E-07. Recreation Use included under shellfish TMDL approved 8/2/06 under TMDL ID = VAT-C11E-07 (24498).

Onancock Creek Mainstem - Upper

Recreation (Sq. Miles)

0.074

Estuary

Reservoir (Acres)

River (Miles)

Enterococcus - Total Impaired Size by Water Type: 0.271

Sources:

Final 2008 Page 1864 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C11E-11-SF

Chesconessex Creek - Upper

Location: This cause encompasses the upper portion of Chesconessex Creek. CBP segment CB7PH. DSS shellfish direct harvesting condemnation # 079-112 A (effective 20060626).

City / County: Accomack Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

The Shellfishing Use is not supporting due to DSS shellfish direct harvesting condemnation # 079-112 A (effective 20060626). Previous Use ID (2006 IR) as TMDL ID: VDH-Bay PCBs.

1998 CD segment for shellfish (Attachment A, Category 3) VAT-C11E-11.

Chesconessex Creek - Upper

Estuary

Reservoir

Shellfishing

(Sq. Miles)

River (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type:

0.209

Sources:

Source Unknown

Final 2008 Page 1865 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C11E-12-SF Finneys Creek - Upper

Location: This cause encompasses the upper portion of Finneys Creek. CBP segment CB7PH. DSS shellfish direct harvesting

condemnation # 080-013 C (effective 20061123).

City / County: Accomack Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 4A

The Shellfishing Use is not supporting due to DSS shellfish direct harvesting condemnation # 080-013 C (effective 20061123). Previous Use ID (2006 IR) as TMDL ID: VAT-C11E-12. Covered under TMDL ID VAT-C11E-14-SF (25415), Onancock Creek, EPA approved 8/2/2006.

1998 CD segment for shellfish (Attachment A, Category 3) VAT-C11E-12.

Finneys Creek - Upper Estuary Reservoir River
Shellfishing (Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.067

Sources:

Source Unknown

Final 2008 Page 1866 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C11E-13-SF

Onancock Creek Mainstem-Upper, Central Branch and Cedar Creek

Location: This cause encompasses the Onancock Creek mainstem, from the junction of North, Central & South Branches downstream to the end of DSS condemnation (RM 3.6) midway between Leatherberry and Cedar Crs. CBP segment CB7PH. Portion of DSS shellfish condemnation # 081-013 B (effective 20061123).

City / County: Accomack Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 4A

The Shellfishing Use is not supporting due to DSS shellfish direct harvesting condemnation # 080-013 A (effective 20061123). Previous Use ID (2006 IR) as TMDL ID: VAT-C11E-13. Covered under TMDL ID VAT-C11E-14-SF (25415), Onancock Creek, EPA approved 8/2/2006.

1998 CD segment for shellfish (Attachment A, Category 3) VAT-C11E-13. TMDL approved 8/2/06.

Onancock Creek Mainstem-Upper, Central Branch and Cedar Creek

Estuary (Sq. Miles) Reservoir (Acres)

River

Fecal Coliform - Total Impaired Size by Water Type:

0.352

(Miles)

Sources:

Shellfishing

Source Unknown

Final 2008 Page 1867 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C11E-14-SF

Southern Branch, Onancock Creek and Leatherberry Creek

Location: This cause encompasses the entire Southern Branch, Onancock Creek. CBP segment CB7PH. Portion of DSS shellfish condemnation # 081-013 B (effective 20061123).

City / County: Accomack Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 4A

The Shellfishing Use is not supporting due to DSS shellfish direct harvesting condemnation # 080-013 B (effective 20061123). Previous Use ID (2006 IR) as TMDL ID: VAT-C11E-14. Shellfish TMDL approved 8/2/06 under TMDL ID = VAT-C11E-14-SF(25415).

May be related to previous (2006 IR) exceedance of the Fecal Coliform bacteria criteria and exhibits Observed Effects due to unsufficient exceedance of Enterococcus bacteria criteria within a small data set (1 violates / 3 obs.).

1998 CD segment for shellfish (Attachment A, Category 3) VAT-C11E-14. TMDL approved 8/2/06.

Southern Branch, Onancock Creek and Leatherberry Creek Shellfishing

Estuary (Sq. Miles) Reservoir (Acres)

River (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.128

Sources:

Source Unknown

Final 2008 Page 1868 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C11E-15-SF

Matchotank Creek - Upper

Location: This cause encompasses the upper portion of Matchotank Creek. CBP segment CB7PH. DSS shellfish direct harvesting conedmnation # 080-169 A (effective 20061123).

City / County: Accomack Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 4A

The Shellfishing Use is not supporting due to DSS shellfish direct harvesting condemnation # 080-169 A (effective 20061123).. Previous Use ID (2006 IR) as TMDL ID: VAT-C11E-15. Shellfish TMDL approved 8/2/06 under TMDL ID = VAT-C11E-14-SF(25415).

Matchotank Creek - Upper

Shellfishing

Estuary (Sq. Miles)

Reservoir (Acres)

River (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.

0.086

Sources:

Source Unknown

Final 2008 Page 1869 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C11E-20-SF

Parkers Creek - Upper

Location: This cause encompasses the upper portion of Parkers Creek. CBP segment CB7PH. DSS shellfish direct harvesting condemnation # 080-013 D (effective 20061123).

City / County: Accomack Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

The Shellfishing Use is not supporting due to DSS shellfish direct harvesting condemnation # 080-013 D (effective 20061123). Added for 2008 IR.

Parkers Creek - Upper Estuary Reservoir River
Shellfishing (Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.033

Sources:

Final 2008 Page 1870 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C11R-01-BAC Joynes Branch

Location: This cause encompasses Joynes Branch, eastern riverine tributary to the Central Branch of Onancock Creek

City / County: Accomack Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

The Recreation Use is impaired due to exceedance of the criteria for Ecoli bacteria (4 violates / 9 obs.) at DEQ (AQM) station @ 7-JOY000.59.

Joynes Branch

Recreation

Reservoir River
(Sq. Miles) (Acres) (Miles)

Escherichia coli - Total Impaired Size by Water Type: 2.17

Sources:

Source Unknown

Final 2008 Page 1871 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C12E-10-SF

Pungoteague Creek-Upper and Lower Warehouse Prong

Location: This cause encompasses the upper portion of Pungoteague Creek, from the end of tidal waters downstream to the confluence with Taylor Creek (RM 2.4), and lower portion of Warehouse Prong. Portion of CBP segment CB7PH. Portion of DSS condemnation # 081-119 B (effective 20060629).

City / County: Accomack Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 4A

The Shellfishing Use is not supporting due to DSS shellfish direct harvesting condemnation # 081-119 B. The Recreation Use is impaired based on exceedance of the Enterococcus bacteria criteria (2 violates / 15 obs.). Previous Use ID (2006 IR) as TMDL ID: VAT-C12E-10. Covered

under TMDL (25416) for VAT-C12E-10-SF (approved 6/7/06).

1998 CD segment for shellfish (Attachment A, Category 3) VAT-C12E-10.

Pungoteague Creek-Upper and Lower Warehouse Prong

Shellfishing

Estuary (Sq. Miles)

Reservoir (Acres)

River (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.510

Sources:

Source Unknown

Final 2008 Page 1872 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C12E-11-SF Taylor Creek

Location: This cause encompasses Taylor Creek, from the end of tidal waters downstream to the confluence with Pungoteague Cr. Portion of CBP segment CB7PH. Portion of DSS condemnation # 081-119 B (effective 20060629).

City / County: Accomack Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 4A

The Shellfishing Use is not supporting due to DSS shellfish direct harvesting condemnation # 081-119 B. Previous Use ID (2006 IR) as TMDL ID: VAT-C12E-10. Covered under TMDL (25416) for VAT-C12E-10-SF (approved 6/7/06). 1998 CD segment for shellfish (Attachment A, Category 3) VAT-C12E-11.

Taylor Creek

Shellfishing

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.165

Sources:

Source Unknown

Final 2008 Page 1873 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C12E-12-SF

Underhill Creek

Location: This cause encompasses Underhill Creek. CBP segment CB7PH. DSS shellfish direct harvesting condemnation # 081-119

A. (effective 2004-10-13).

City / County: Accomack Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 4A

The Shellfishing Use is not supporting due to DSS shellfish direct harvesting condemnation # 081-119 A. Effective 2004-10-13. Previous Use ID (2006 IR) as TMDL ID: VAT-C12E-12. Covered under TMDL (25416) for VAT-C12E-10-SF (approved 6/7/06).

Underhill Creek

Estuary (Sq. Miles) **Shellfishing**

Reservoir

(Acres)

River

(Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.091

Sources:

Source Unknown

Final 2008 Page 1874 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C12R-01-BEN Taylor Creek

Location: This cause encompasses the riverine portion of Taylor Creek, from the point where stream forks north of Rt 180 downstream to the confluence of UT below Rt 178.

City / County: Accomack Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

The Aquatic Life Use is impaired due to impacts to the stream's benthic population. Assessment is based on biological benthic monitoring noting MI (F-'01,S-'02,F-'02] at DEQ (BIO) station @ 7-TAY003.11. 2006 IR Use ID = VAT-C12R-01.

Taylor Creek Estuary Reservoir River Aquatic Life (Sq. Miles) (Acres) (Miles)

Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:

0.88

Sources:

Source Unknown

Final 2008 Page 1875 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C12R-02-BEN Bull Branch

Location: This cause encompasses the riverine portion of Bull Branch, from headwaters near Rt 609 (Accomack Co. Airport) downstream to confluence with eastern prong of upper Pungoteague Cr.

City / County: Accomack Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

The Aquatic Life Use is impaired due to impacts to the stream's benthic population. Assessment is based on biological benthic monitoring noting MI [MI: S&F-03, S-04; SI: F-04] at DEQ (BIO) station @ 7-BBR001.31.

Bull Branch

Aquatic Life

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:

2.20

Sources:

Source Unknown

Final 2008 Page 1876 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C13E-02-BAC Nassawadox Creek - Lower

Location: This cause encompasses the lower mainstem of Nassawadox Creek, from confluence with Kelly Cove (RM 5.2) downstream to mouth. Portion of CBP segment CB7PH. DSS (OPEN) shellfish direct harvesting condemnation # 085-110 (effective 20060530).

City / County: Northampton Co.

Use(s): Recreation

Cause(s) /

VA Category: Enterococcus / 5A

The Recreation Use is imapired based on Enterococcus bacteria data which exceeded the criteria. (4 violate / 23 obs.) at DEQ (AQM) station @ 7-NSS001.62. Use ID = VAT-C13E-02.

Nassawadox Creek - LowerEstuaryReservoirRiverRecreation(Sq. Miles)(Acres)(Miles)

Enterococcus - Total Impaired Size by Water Type: 2.002

Sources:

Final 2008 Page 1877 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C13E-11-SF Church Creek - Upper

Location: This cause encompasses the upper portion of Church Creek, tributary to Nassawadox Creek, within the area of DSS shellfish direct harvesting condemnation # 085-185 B (effective 20050706).

City / County: Northampton Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 4A

Fecal Coliform / 5B

The Shellfishing Use is not supporting due to DSS shellfish direct harvesting condemnation # 085-185 B (effective 20050706). Previous Use ID (2006 IR) as TMDL ID: VAT-C13E-11.

Covered under TMDL for "Nassawadox Creek Watershed" (33777), EPA approved 10/20/2007.

1998 CD segment for shellfish (Attachment A, Category 3) VAT-C13E-11.

Church Creek - Upper Estuary Reservoir River
Shellfishing (Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.333

Sources:

Source Unknown

Final 2008 Page 1878 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C13E-12-SF

Craddock Creek - Upper, Holly Grove & Kelley Coves

Location: This cause encompasses the upper portion of Craddock Creek, from end of tidal waters downstream to end of shellfish condemnation (area of TMDL-bact 6/07. Also, the areas of Holly Grove & Kelley Coves within the DSS shellfish direct harvesting condemnation # 083-195 A (effective 20050926).

City / County: Northampton Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 4A

The Shellfishing Use is not supporting due to DSS shellfish direct harvesting condemnation # 083-195 A (effective 20050926).. Previous Use ID (2006 IR) as TMDL ID: VAT-C13E-12.

Covered under TMDL for "Craddock Creek" (25417) EPA approved 6/7/2006.

1998 CD segment for shellfish (Attachment A, Category 3) VAT-C13E-12.

Craddock Creek - Upper, Holly Grove & Kelley Coves

Estuary (Sq. Miles) Reservoir (Acres)

River

Fecal Coliform - Total Impaired Size by Water Type:

0.082

(Miles)

Sources:

Shellfishing

Source Unknown

Final 2008 Page 1879 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C13E-13-SF

Kelley and Holly Grove Coves

Location: This cause encompasses the entirety of these two Coves, from end of tidal waters downstream to confluence with Nassawadox Cr. (area of TMDL-bact 6/07). Portion of CBP segment CB7PH. Portion of DSS shellfish direct harvesting condemnation # 085-110 D (effective 20060530).

City / County: Northampton Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 4A

The Shellfishing Use is not supporting due to DSS shellfish direct harvesting condemnation # 085-185 B (effective 20050706). Previous Use ID (2006 IR) as TMDL ID: VAT-C13E-13.

Covered under TMDL for "Nassawadox Creek Watershed" (33777) EPA approved 10/20/2007.

1998 CD segment for shellfish (Attachment A, Category 3) VAT-C13E-11.

Kelley and Holly Grove Coves

Shellfishing

Estuary (Sq. Miles)

Reservoir (Acres)

River (Miles)

Fecal Coliform - Total Impaired Size by Water Type:

0.168

Sources:

Source Unknown

Final 2008 Page 1880 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C13E-14-SF

Nassawadox Creek - Upper

Location: This cause encompasses the upper portion of Nassawadox Creek, from end of tidal waters downstream to confluence with Kelly Cove (RM 5.2) area of TMDL-bact 6/07. Portion of CBP segment CB7PH. Portion of DSS shellfish direct harvesting condemnation # 085-110 D (effective 20060530).

City / County: Northampton Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 4A

The Shellfishing Use is not supporting due to DSS shellfish direct harvesting condemnation # 085-185 B (effective 20050706). Previous Use ID (2006 IR) as TMDL ID: VAT-C13E-14.

Covered under TMDL for "Nassawadox Creek Watershed" (33777) EPA approved 10/20/2007.

1998 CD segment for shellfish (Attachment A, Category 3) VAT-C13E-11.

Nassawadox Creek - Upper Estuary

Shellfishing (Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.238

Reservoir

River

Sources:

Source Unknown

Final 2008 Page 1881 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C13E-15-SF

Occohannock Creek - Upper

Location: This cause encompasses the upper portion of Occohannock Creek and tidal tributaries, from the end of tidal waters downstream to the the confluence of Wescott Cove (RM 5.3). DSS shellfish direct harvesting condemnation # 084-043 A

(effective 20050908).

City / County: Accomack Co. Northampton Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 4A

The Shellfishing Use is not supporting due to DSS shellfish direct harvesting condemnation # 084-043 A (effective 20050908).

Previous Use ID (2006 IR) as TMDL ID: VAT-C13E-15. Covered under TMDL for "Occohannock Creek" (25421) EPA approved 6/7/2006).

1998 CD segment for shellfish (Attachment A, Category 3) VAT-C13E-15.

Occohannock Creek - Upper

River **Estuary** Reservoir (Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.338

Sources:

Shellfishing

Source Unknown

Final 2008 Page 1882 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C13E-16-SF

Warehouse Creek - Middle

Location: This cause encompasses the middle portion of Warehouse Creek, including the northern fork and continuing downstream to bend near Wellington Neck. DSS shellfish direct harvesting condemnation # 085-110 F (effective 20060530).

City / County: Northampton Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 4A

The Shellfishing Use is not supporting due to DSS shellfish direct harvesting condemnation # 085-185 B (effective 20050706).

Previous Use ID (2006 IR) as TMDL ID: VAT-C13E-16.

Covered under TMDL for "Nassawadox Creek Watershed" (33777) EPA approved 10/20/2007.

1998 CD segment for shellfish (Attachment A, Category 3) VAT-C13E-11.

Warehouse Creek - Middle

Shellfishing

Estuary (Sq. Miles)

Reservoir (Acres)

River (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.275

Sources:

Source Unknown

Final 2008 Page 1883 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C13E-18-SF McLean Gut - Upper

Location: This cause encompasses the upper portion of McLean Gut. Area within the DSS shellfish direct harvesting condemnation #

082-160 C (effective 20061013).

City / County: Northampton Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 4A

The Shellfishing Use is not supporting due to DSS shellfish direct harvesting condemnation # 082-160 C (effective 20061013).

Previous Use ID (2006 IR) as TMDL ID: VAT-C13E-18

Covered under TMDL for "Nandua and Curratuck Creeks" (25419) EPA approved 6/7/2006.

1999 CD segment for shellfish (Attachment A, Category 3) VAT-C13E-18.

McLean Gut - Upper Estuary Reservoir River
Shellfishing (Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.052

Sources:

Source Unknown

Final 2008 Page 1884 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C13E-19-SF Nandua Creek - Upper

Location: This cause encompasses the two most upstream branches of Nandua Creek, incl. Kusian Cove, and mainstem downstream to area of Nandua (approx. RM 4.5). Portion of CBP segment CB7PH. DSS condemnation # 082-160 A (effective 20061013).

City / County: Northampton Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 4A

The Shellfishing Use is not supporting due to DSS shellfish direct harvesting condemnation # 082-160 A (effective 20061013).

Previous Use ID (2006 IR) as TMDL ID: VAT-C13E-19

Covered under TMDL for "Nandua and Curratuck Creeks" (25419) EPA approved 6/7/2006.

1999 CD segment for shellfish (Attachment A, Category 3) VAT-C13E-19.

Nandua Creek - UpperEstuaryReservoirRiverShellfishing(Sq. Miles)(Acres)(Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.225

Sources:

Source Unknown

Final 2008 Page 1885 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C13E-20-SF

Nassawadox Creek-Upper and UT to Lower Church Creek

Location: This cause encompasses the tributaries and mainstem Nassawadox Creek, from confluence with Kelly Cove (RM 5.2) downstream to mainstem (outside of area of TMDL-bact 6/07). Portion of CBP segment CB7PH. Portion of DSS shellfish direct harvesting condemnation # 085-110 D (effective 20060530).

City / County: Northampton Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

The Shellfishing Use is not supporting due to DSS shellfish direct harvesting condemnation # 085-110 D (effective 20060530). Added in 2008 IR shellfish closures, not covered under TMDL for "Nassawadox Creek Watershed" (33777) EPA approved 10/20/2007.

Nassawadox Creek-Upper and UT to Lower Church Creek

Estuary (Sq. Miles)

0.434

Reservoir (Acres)

River (Miles)

Fecal Coliform - Total Impaired Size by Water Type:

Sources:

Shellfishing

Source Unknown

Final 2008 Page 1886 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C13E-21-SF UT to Lower Craddock Creek

Location: This cause encompasses this north shore UT to lower Craddock Creek, from the end of tidal waters downstream to the end of DSS condemnation. DSS shellfish direct harvesting condemnation # 083-195 B (effective 20050926).

City / County: Northampton Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

The Shellfishing Use is not supporting due to DSS shellfish direct harvesting condemnation # 083-195 B (effective 20050926).. Added in 2008 IR shellfish closures, not covered under TMDL for "Craddock Creek" (25417) EPA approved 6/7/2006.

UT to Lower Craddock Creek

Shellfishing

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.036

Sources:

Source Unknown

Final 2008 Page 1887 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C13E-22-SF

Upper Back Creek and Fisher, Boggs and Shields Coves

Location: This cause encompasses the estuarine portions of the following: Fisher, Boggs and Shields Coves. Within the area described in VDH Notice and Description of Shellfish Direct Harvesting Condemnation #084-043 C (effective 20050908).

City / County: Northampton Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

The Shellfishing Use is not supporting due to

DSS shellfish direct harvesting condemnation # 082-160 D (effective 20061013).

Upper Back Creek and Fisher, Boggs and Shields Coves

Fecal Coliform - Total Impaired Size by Water Type: 0.142 River

(Miles)

Reservoir

(Acres)

Estuary

(Sq. Miles)

Sources:

Shellfishing

Source Unknown

Final 2008 Page 1888 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C13R-01-BEN Taylor Branch - Occohannock Cr.

Location: This cause encompasses Taylor Branch, from the confluence of two branches upstream of station downstream to the

confluence with Occohannock Creek.

City / County: Accomack Co. Northampton Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

The Aquatic Life Use is impaired due to impacts to the stream's benthic population. Assessment is based on biological benthic monitoring noting MI [MI: S-01] at DEQ (BIO) station @ 7-TLR000.70

Taylor Branch - Occohannock Cr.

Estuary Reservoir (Sq. Miles) (Acres)

ir River (Miles)

Aquatic Life

Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:

0.97

Sources:

Source Unknown

Final 2008 Page 1889 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C14E-01-BAC Hungars Creek - Upper

Location: This cause encompasses the upper portion of Hungars Creek from end tidal waters downstream to Waterford Point (RM 1.8)

@ confluence with Jacobus Cr.

City / County: Northampton Co.

Use(s): Recreation

Cause(s) /

VA Category: Fecal Coliform / 5A

The Recreation Use is impaired based on exceedance (5 violates / 9 obs.) of the Fecal Coliform bacteria criteria based on data from station 7-HUG004.40. The FC impairment is retained as there are no Entero bacteria data to verify the assessment status.

1998 CD segment for FC & DO (Attachment A, Category 1, Part 2 & Attachment B) VAT-C14E-01.

Hungars Creek - Upper Estuary Reservoir River (Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.221

Sources:

Source Unknown

Final 2008 Page 1890 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C14E-01-SF **Hungars Creek - Upper**

Location: This cause encompasses the upper portion of Hungars Creek from end tidal waters downstream to Waterford Point (RM 1.8)

@ confluence with Jacobus Cr.

City / County: Northampton Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

The Shellfishing Use is not supporting due to DSS shellfish direct harvesting condemnation # 086-136 A. Previous (2006 IR)

TMDL ID = VAT-C14E-01.

Hungars Creek - Upper

Estuary Reservoir River (Sq. Miles) (Acres) (Miles) **Shellfishing**

> Fecal Coliform - Total Impaired Size by Water Type: 0.221

Sources:

Source Unknown

Page 1891 of 2208 Final 2008

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C14E-10-SF Barlow Creek - Upper

Location: This cause encompasses upper Barlow Creek. DSS shellfish direct harvesting condemnation # 086-136 D (effective

20060908).

City / County: Accomack Co. Northampton Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

The Shellfishing Use is not supporting due to

DSS shellfish direct harvesting condemnation # 086-136 D (effective 20060908). The Shellfishing Use is impaired based on the

DSS shellfish harvesting condemnation which is present.

1999 CD segment for shellfish (Attachment A, Category 3) VAT-C14E-10.

Barlow Creek - Upper Estuary Reservoir River
Shellfishing (Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.039

Sources:

Final 2008 Page 1892 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C14E-12-SF

Jacobus Creek - Middle, Forks and Lower

Location: This cause encompasses Jacobus Creek middle mainstem, north fork and lower portion of south fork. Portion of CBP segment CB7PH. DSS shellfish direct harvesting condemnation # 086-136 B (effective 20060908).

City / County: Accomack Co. Northampton Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

The Shellfishing Use is not supporting due to

DSS shellfish direct harvesting condemnation # 086-136 B (effective 20060908). The Shellfishing Use is impaired based on the DSS shellfish harvesting condemnation which is present.

1999 CD segment for shellfish (Attachment A, Category 3) VAT-C14E-12.

Jacobus Creek - Middle, Forks and Lower **Shellfishing**

Estuary (Sq. Miles)

Reservoir (Acres)

River (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.387

Sources:

Final 2008 Page 1893 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C14E-13-SF Mattawoman Creek - Upper

Location: This cause encompasses upper Mattawoman Creek. DSS shellfish direct harvesting condemnation # 086-136 C (effective

20060908).

City / County: Accomack Co. Northampton Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

The Shellfishing Use is not supporting due to

DSS shellfish direct harvesting condemnation # 086-136 C (effective 20060908). The Shellfishing Use is impaired based on the

DSS shellfish harvesting condemnation which is present.

1999 CD segment for shellfish (Attachment A, Category 3) VAT-C14E-13.

Mattawoman Creek - Upper Estuary Reservoir River
Shellfishing (Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.231

Sources:

Final 2008 Page 1894 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C14E-14-SF

The Gulf - Upper

Location: This cause encompasses the upper portion of The Gulf, from end of tidal waters downstream to narrowing 0.45 mi. from mouth. DSS shellfish direct harvesting condemnation # 087-174 A (effective 20060908).

City / County: Northampton Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 4A

The Shellfishing Use is not supporting due to

DSS shellfish direct harvesting condemnation # 087-174 A (effective 20060908). The Shellfishing Use is impaired due to the DSS shellfish harvesting condemnation which is present. Previous Use ID (2006 IR) as TMDL ID: VAT-C14E-14. This impairment is covered under TMDL for "The Gulf" (33770) VAT-C14E-14-SF, EPA approved 9/20/2007.

1998 CD segment for shellfish (Attachment A, Category 3) VAT-C14E-14.

The Gulf - Upper Estuary Reservoir River
Shellfishing (Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.140

Sources:

Source Unknown

Final 2008 Page 1895 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C14E-15-SF Westerhouse Creek - North Branch

Location: This cause encompasses the North Branch of Westerhouse Creek. DSS shellfish direct harvesting condemnation # 085-199

A (effective 20050706).

City / County: Northampton Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 4A

The Shellfishing Use is not supporting due to

DSS shellfish direct harvesting condemnation # 085-199 A (effective 20050706). Previous Use ID (2006 IR) as TMDL ID: VAT-

C14E-15.

Covered under TMDL for "Nassawadox Creek Watershed" (33777) EPA approved 10/20/2007.

1999 CD segment for shellfish (Attachment A, Category 3) VAT-C14E-15.

Westerhouse Creek - North Branch

Shellfishing (Sq. Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.033

River

(Miles)

Reservoir

(Acres)

Estuary

Sources:

Source Unknown

Final 2008 Page 1896 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C14E-16-SF

Westerhouse Creek - Upper South Branch

Location: This cause encompasses the upper portion of Westerhouse Creek, South Branch. DSS shellfish direct harvesting condemnation # 085-199 B (effective 20050706).

City / County: Northampton Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 4A

The Shellfishing Use is not supporting due to

DSS shellfish direct harvesting condemnation # 085-199 B (effective 20050706). Previous Use ID (2006 IR) as TMDL ID: VAT-

C14E-16.

Covered under TMDL for "Nassawadox Creek Watershed" (33777) EPA approved 10/20/2007.

1999 CD segment for shellfish (Attachment A, Category 3) VAT-C14E-16.

Westerhouse Creek - Upper South Branch

Shellfishing

Estuary (Sq. Miles)

Reservoir (Acres)

River (Miles)

Fecal Coliform - Total Impaired Size by Water Type:

0.034

Sources:

Source Unknown

Final 2008 Page 1897 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C15E-10-SF Kings Creek - Upper Forks

Location: This cause encompasses the upper Forks of Kings Creek, from end of tidal waters downstream 0.16 mi. past confluence of the two most upstream forks. Portion of CBP segment CB7PH. DSS shellfish direct harvesting condemnation # 088-139 A (effective 20060804).

City / County: Northampton Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 4A

The Shellfishing Use is impaired due to the DSS shellfish harvesting condemnation # 088-139 A (effective 20060804). Previous Use ID (2006 IR) as TMDL ID: VAT-C15E-10. This impairment is covered under TMDL for "Cherrystone Inlet" which includes Kings Creek (33772) VAT-C15E-10-SF, EPA approved 9/20/2007.

1999 CD segment for shellfish (Attachment A, Category 3) VAT-C15E-10.

Kings Creek - Upper Forks

Shellfishing

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.077

Sources:

Source Unknown

Final 2008 Page 1898 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C16E-01-BAC Cape Charles Harbor - Upper

Location: This cause encompasses the upper portion of Cape Charles Harbor, from most upstream end of harbor downstream to 1/2 distance to mouth (RM 0.23).

City / County: Northampton Co.

Use(s): Recreation

Cause(s) /

VA Category: Enterococcus / 5A

The Recreation Use is impaired (6 violate / 25 obs.) due to exceedance of the instantaneous criteria for Enterococcus bacteria at station 7-CCH000.43. Use ID = VAT-C16E-01.

Cape Charles Harbor - Upper Estuary Reservoir River (Sq. Miles) (Acres) (Miles)

Enterococcus - Total Impaired Size by Water Type: 0.056

Sources:

Final 2008 Page 1899 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code C16E-10-SF Old Plan

Old Plantation Creek - Upper

Location: This cause encompasses the upper portion of Old Plantation Creek. DSS shellfish direct harvesting condemnation # 090-

152 A (effective 20040930).

City / County: Northampton Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 4A Fecal Coliform / 5B

The Shellfishing Use is impaired due to the DSS shellfish harvesting condemnation # 090-152 A (effective 20040930). Previous

Use ID (2006 IR) as TMDL ID = VAT-C16E-10.

This impairment is not covered under TMDL for "Old Plantation and Elliot Creeks" (33772) VAT-C16E-10-SF, EPA approved

8/30/2007.

Old Plantation Creek - Upper

Shellfishing

Estuary (Sq. Miles)

Reservoir (Acres)

River (Miles)

Fecal Coliform - Total Impaired Size by Water Type:

0.109

Sources:

Source Unknown

Final 2008 Page 1900 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code CB5MH-DO-BAY Chesapeake Bay segment CB5MH

Location: This cause encompasses the complete CBP segment CB5MH.

City / County: Chesapeake Bay - Cor Lancaster Co. Northumberland Co.

Use(s): Aquatic Life Deep-Channel Seasonal Deep-Water Aquatic Life

Refuge

Cause(s) /

VA Category: Oxygen, Dissolved / 5A

The 30-day dissolved oxygen criteria for deep water use and the instantaneous dissolved oxygen criteria for deep channel use failed for the 2008 assessment in segment CB5MH. There is insufficient data to assess remaining shorter dissolved oxygen criteria for these uses. The 30-day dissolved oxygen criteria for open water use was met but there is insufficient data to assess the remaining dissolved oxygen criteria for this use is considered insufficient data in AUs which were previously impaired for this use.

Chesapeake Bay segment CB5I Aquatic Life	МН		Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
	Oxygen, Dissolved - Tot	tal Impaired Size by Water Type:	205.422		
Chesapeake Bay segment CB5I	MH		Estuary	Reservoir	River
Deep-Channel Seasonal Refuge			(Sq. Miles)	(Acres)	(Miles)
	Oxygen, Dissolved - Tot	Oxygen, Dissolved - Total Impaired Size by Water Type:			
Chesapeake Bay segment CB5	MH		Estuary	Reservoir	River
Deep-Water Aquatic Life			(Sq. Miles)	(Acres)	(Miles)
	Oxygen, Dissolved - Tot	Oxygen, Dissolved - Total Impaired Size by Water Type:			
Sources:					
Agriculture	Atmospheric Deposition - Nitrogen	Industrial Point Source Discharge	Internal Nutrient Recycling		
Loss of Riparian Habitat	Municipal Point Source Discharges	Sources Outside State Jurisdiction or Borders	Wet Weather Discharges (Point Source and Combination of Stormwater, SSO or CSO)		

Final 2008 Page 1901 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code CB5MH-EBEN-BAY Mainstem Chesapeake Bay portion (i.e. excluding tributaries) of CBP segment CB5MH

Location: This cause encompassed only the "mainstem" portion of CPB segment CB5MH. It does not include any "tributary" areas

encompassed by this CBP segment.

City / County: Chesapeake Bay - Cor Lancaster Co. Northumberland Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Estuarine Bioassessments / 5A

The estuarine benthic index of biological integrity assessment showed that the mainstem waters of CBP segment CB5MH was impaired for benthic macroinvertebrate communities.

Mainstem Chesapeake Bay portion (i.e. excluding tributaries) of CBP segment CB5MH

Estuary Reservoir River (Sq. Miles) (Acres) (Miles)

Estuarine Bioassessments - Total Impaired Size by Water Type: 192.756

Sources:

Agriculture Atmospheric Deposition - Industrial Point Source Internal Nutrient Recycling

Nitrogen Discharge

Loss of Riparian Habitat Municipal Point Source Source Unknown Sources Outside State
Discharges Jurisdiction or Borders

Wet Weather Discharges (Point Source and Combination of Stormwater, SSO or CSO)

Final 2008 Page 1902 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code CB5MH-SAV-BAY **Chesapeake Bay segment CB5MH**

Location: This cause encompasses the complete CBP segment CB5MH.

City / County: Chesapeake Bay - Cor Lancaster Co. Northumberland Co.

Use(s): Aquatic Life Shallow-Water Submerged

Aquatic Vegetation

Cause(s) /

VA Category: Aquatic Plants (Macrophytes) / 5A

The acres of submerged aquatic vegetation (SAV) mapped through aerial surveys does not meet the criteria in segment CB5MH. There is insufficient data to assess the water clarity criteria.

Chesapeake Bay segment CB5MH **Estuary** River Reservoir (Sq. Miles) (Acres) (Miles) **Aquatic Life** Aquatic Plants (Macrophytes) - Total Impaired Size by Water Type: 213.497

Chesapeake Bay segment CB5MH **Estuary** Reservoir River (Sq. Miles) (Acres) (Miles) **Shallow-Water Submerged Aquatic Vegetation**

> Aquatic Plants (Macrophytes) - Total Impaired Size by Water Type: 213.497

Sources:

Agriculture Atmospheric Deposition -Clean Sediments Industrial Point Source

Nitrogen Discharge

Municipal Point Source Internal Nutrient Recycling Loss of Riparian Habitat Sediment Resuspension Discharges (Clean Sediment)

Sources Outside State Wet Weather Discharges

Jurisdiction or Borders (Point Source and Combination of Stormwater,

SSO or CSO)

Final 2008 Page 1903 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code CB6PH-DO-BAY Chesapeake Bay segment CB6MH

Location: This cause encompasses the complete CBP segment CB6PH.

City / County: Chesapeake Bay - Cor Mathews Co.

Use(s): Aquatic Life Deep-Water Aquatic Life Open-Water Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5A

The 30-day dissolved oxygen criteria for deep water use and open water use are failed for the 2008 assessment. There is insufficient data to assess remaining shorter dissolved oxygen criteria for these uses.

Chesapeake Bay segment CBo Aquatic Life	6MH		Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
	Oxygen, Dissolved - Tot	Oxygen, Dissolved - Total Impaired Size by Water Type:			
Chesapeake Bay segment CBo Deep-Water Aquatic Life	6MH		Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
, ,	Oxygen, Dissolved - Tot	Oxygen, Dissolved - Total Impaired Size by Water Type:			
Chesapeake Bay segment CB	6MH		Estuary	Reservoir	River
Open-Water Aquatic Life			(Sq. Miles)	(Acres)	(Miles)
	Oxygen, Dissolved - Tot	Oxygen, Dissolved - Total Impaired Size by Water Type:			
Sources:					
Agriculture	Atmospheric Deposition - Nitrogen	Industrial Point Source Discharge	Internal Nutrient Recycling		
Loss of Riparian Habitat	Municipal Point Source Discharges	Sources Outside State Jurisdiction or Borders	Wet Weather Discharges (Point Source and Combination of Stormwater SSO or CSO)		

Final 2008 Page 1904 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code CB6PH-SAV-BAY **Chesapeake Bay segment CB6PH**

Location: This cause encompasses the complete CBP segment CB6PH.

City / County: Chesapeake Bay - Coi Mathews Co.

Use(s): Aquatic Life Shallow-Water Submerged

Aquatic Vegetation

Cause(s) /

VA Category: Aquatic Plants (Macrophytes) / 5A

The acres of submerged aquatic vegetation (SAV) mapped through aerial surveys does not meet the criteria. There is

insufficient data to assess the water clarity criteria.

Chesapeake Bay segment CB6PH

Estuary Reservoir (Sq. Miles) (Acres) **Aquatic Life**

> Aquatic Plants (Macrophytes) - Total Impaired Size by Water Type: 292.107

River

(Miles)

River

(Miles)

Estuary

(Sq. Miles)

Discharge

Reservoir

(Acres)

Chesapeake Bay segment CB6PH

Shallow-Water Submerged Aquatic Vegetation

Aquatic Plants (Macrophytes) - Total Impaired Size by Water Type: 292.107

Sources:

Agriculture Atmospheric Deposition -Clean Sediments Industrial Point Source

Nitrogen

Municipal Point Source Internal Nutrient Recycling Loss of Riparian Habitat Sediment Resuspension Discharges (Clean Sediment)

Sources Outside State Wet Weather Discharges Jurisdiction or Borders (Point Source and

Combination of Stormwater,

SSO or CSO)

Final 2008 Page 1905 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code CB7PH-DO-BAY **Chesapeake Bay segment CB7PH**

Location: This cause encompasses the complete CBP segment CB7PH.

Chesapeake Bay - Col Northampton Co. City / County: Accomack Co.

Use(s): Aquatic Life Open-Water Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5A

The 30-day dissolved oxygen criteria for open water use failed for the 2008 assessment. The 30-day dissolved oxygen criteria for deep water use was met. There is insufficient data to assess remaining shorter dissolved oxygen criteria for these uses.

Chesapeake Bay segment CB7PF Aquatic Life	1		Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
	Oxygen, Dissolved - Tot	al Impaired Size by Water Type:	586.865		
Chesapeake Bay segment CB7PH Open-Water Aquatic Life	1		Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
	Oxygen, Dissolved - Tot	al Impaired Size by Water Type:	586.865		
Sources:					
Agriculture	Atmospheric Deposition -	Clean Sediments	Industrial Point Source		

Nitrogen Discharge

Internal Nutrient Recycling Loss of Riparian Habitat Municipal Point Source Sediment Resuspension Discharges (Clean Sediment)

Sources Outside State Wet Weather Discharges Wet Weather Discharges

Jurisdiction or Borders (Non-Point Source) (Point Source and Combination of Stormwater,

SSO or CSO)

Final 2008 Page 1906 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code CB7PH-SAV-BAY **Chesapeake Bay segment CB7PH**

Location: This cause encompasses the complete CBP segment CB7PH.

City / County: Accomack Co. Chesapeake Bay - Col Northampton Co.

Use(s): Aquatic Life Shallow-Water Submerged

Aquatic Vegetation

Cause(s) /

VA Category: Aquatic Plants (Macrophytes) / 5A

The acres of submerged aquatic vegetation (SAV) mapped through aerial surveys does not meet the criteria. There is

insufficient data to assess the water clarity criteria.

Chesapeake Bay segment CB7PH

Estuary River Reservoir (Sq. Miles) (Acres) (Miles) **Aquatic Life**

> Aquatic Plants (Macrophytes) - Total Impaired Size by Water Type: 586.865

Chesapeake Bay segment CB7PH

Shallow-Water Submerged Aquatic Vegetation

Aquatic Plants (Macrophytes) - Total Impaired Size by Water Type: 586.865

Sources:

Agriculture Atmospheric Deposition -

Nitrogen

Internal Nutrient Recycling Loss of Riparian Habitat

Sources Outside State Wet Weather Discharges Jurisdiction or Borders (Non-Point Source)

Clean Sediments

Municipal Point Source

Discharges

Wet Weather Discharges (Point Source and

Combination of Stormwater,

Estuary

(Sq. Miles)

Discharge

Reservoir

(Acres)

Industrial Point Source

Sediment Resuspension

(Clean Sediment)

River

(Miles)

SSO or CSO)

Final 2008 Page 1907 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code CB8PH-SAV-BAY **Chesapeake Bay segment CB8PH**

Location: This cause encompasses the complete CBP segment CB6PH.

City / County: Chesapeake Bay - Coi Norfolk City Virginia Beach City

Use(s): Aquatic Life Shallow-Water Submerged

Aquatic Vegetation

Cause(s) /

VA Category: Aquatic Plants (Macrophytes) / 5A

The acres of submerged aquatic vegetation (SAV) mapped through aerial surveys does not meet the criteria. There is

insufficient data to assess the water clarity criteria.

Chesapeake Bay segment CB8PH

Estuary River Reservoir (Sq. Miles) (Acres) (Miles) **Aquatic Life**

> Aquatic Plants (Macrophytes) - Total Impaired Size by Water Type: 156.117

Chesapeake Bay segment CB8PH

Shallow-Water Submerged Aquatic Vegetation

Estuary

(Sq. Miles)

(Clean Sediment)

Reservoir

(Acres)

River

(Miles)

Aquatic Plants (Macrophytes) - Total Impaired Size by Water Type: 156.117

Sources:

Agriculture Atmospheric Deposition -Clean Sediments Industrial Point Source Discharge

Nitrogen

Municipal Point Source Internal Nutrient Recycling Loss of Riparian Habitat Sediment Resuspension

Discharges

Sources Outside State Wet Weather Discharges Wet Weather Discharges

Jurisdiction or Borders (Non-Point Source) (Point Source and

Combination of Stormwater,

SSO or CSO)

Final 2008 Page 1908 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code D01E-02-BAC Little Mosquito Creek

Location: This cause encompasses the upper and lower portions of the Creek.

City / County: Accomack Co.

Use(s): Recreation

Cause(s) /

VA Category: Enterococcus / 5A

The Recreation Use is impaired based on Enterococcus exceedances of the swimming criteria indicator at lower segment (2 violates / 15 observations) and upper segment (5 violations/ 25 observations).

Little Mosquito Creek

Reservoir River
(Sq. Miles) (Acres) (Miles)

Enterococcus - Total Impaired Size by Water Type: 0.208

Sources:

Source Unknown

Final 2008 Page 1909 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code D01E-02-DO Little Mosquito Creek

Location: This cause encompasses the upper and lower portions of the Creek.

City / County: Accomack Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5A

The Aquatic Life Use is impaired based on DO data that exceed the criteria for this parameter at both upper and lower portions of Little Mosquito Creek. The lower portion is impaired for DO with (5 violate / 35 obs). The data to assess the Aquatic Life Use for the upper portion of Little Mosquito Creek was extrapolated from downstream station (DEQ-AQM station @ 7-LTM000.80).

Little Mosquito Creek

Estuary Reservoir River

Aquatic Life (Sq. Miles) (Acres) (Miles)

Oxygen, Dissolved - Total Impaired Size by Water Type: 0.208

Sources:

Source Unknown

Final 2008 Page 1910 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code D01E-02-SF Little Mosquito Creek - Lower

Location: Described in VDH Notice and Description of Shellfish Direct Harvesting Condemnation # 100-032A (effective 2005-11-09).

City / County: Accomack Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

The Shellfishing Use is not supporting with DSS shellfish harvesting condemnation # 100-032A

Little Mosquito Creek - Lower Estuary Reservoir River
Shellfishing (Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.138

Sources:

Source Unknown

Final 2008 Page 1911 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code **D01E-03-BAC** Powells Bay

Location: This cause encompasses the entirety of Powells Bay. NW of Wallops Island, between Watts and Bogues Bays.

City / County: Accomack Co.

Use(s): Recreation

Cause(s) /

VA Category: Enterococcus / 5A

The Recreation Use is impaired based on Enterococcus exceedances of the swimming criteria indicator (2 violates / 12obs.). This assessment unit is added as impaired for the 2006 IR TMDL ID VAT-D01E-03.

Powells Bay

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Enterococcus - Total Impaired Size by Water Type: 0.597

Sources:

Source Unknown

Final 2008 Page 1912 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code D01E-04-BAC Swan Gut Creek

Location: This cause encompasses the entirety of Swan Gut Creek. From Virginia/Maryland state line downstream to Rivermile 0.13, above the confluence with Chincoteague Bay.

City / County: Accomack Co.

Use(s): Recreation

Cause(s) /

VA Category: Enterococcus / 5A

The Recreation Use is impaired based on Enterococcus exceedances of the swimming criteria indicator (6 violates / 14 obs.) at Station 7-PWB000.20.

Swan Gut Creek

Estuary Reservoir River

(Sq. Miles) (Acres) (Miles)

Enterococcus - Total Impaired Size by Water Type: 0.120

Sources:

Source Unknown

Final 2008 Page 1913 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code D01E-04-DO

Swan Gut Creek

Location: This cause encompasses the entirety of Swan Gut Creek. From Virginia/Maryland state line downstream to Rivermile 0.13, above the confluence with Chincoteague Bay.

City / County: Accomack Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5A

The Aquatic Life Use is impaired based on dissolved oxygen concentrations that exceed the criteria for this parameter (4 violates / 26 obs.) at Station 7-PWB000.20.

Swan Gut Creek

Estuary Reservoir River

Aquatic Life (Sq. Miles) (Acres) (Miles)

Oxygen, Dissolved - Total Impaired Size by Water Type: 0.120

Sources:

Source Unknown

Final 2008 Page 1914 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code **D01E-04-SF**

Swan Gut Creek

Location: Described in VDH Notice and Description of Shellfish Direct Harvesting Condemnation # 100-097 (effective 2005-11-9)

City / County: Accomack Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

The Shellfishing Use is not supporting with DSS shellfish harvesting condemnation # 100-097 (effective 2005-11-9)

Swan Gut Creek

Estuary Reservoir River

Shellfishing (Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.120

Sources:

Source Unknown

Final 2008 Page 1915 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code D01E-05-SF Big Simoneaston Creek

Location: Described in VDH Notice and Description of Shellfish Direct Harvesting Condemnation # 099-211 (Effective Date 11-1-2006).

City / County: Accomack Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

The Shellfishing Use is not supporting with DSS shellfish harvesting condemnation #099-211 A effective date 11-1-2006.

Big Simoneaston Creek

Estuary Reservoir River

Shellfishing (Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.018

Sources:

Source Unknown

Final 2008 Page 1916 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code D01E-13-SF **Greenbackville Harbor - DSS**

(Sq. Miles)

(Acres)

Location: Described in VDH Notice and Description of Shellfish Direct Harvesting Condemnation #100-153 (effective 2005-11-09).

City / County: Accomack Co.

Use(s): Shellfishing

Cause(s) /

Shellfishing

VA Category: Fecal Coliform / 5B

The Shellfishing Use is not supporting with DSS shellfish harvesting condemnation # 100-153 (effective 2005-11-09).

Greenbackville Harbor - DSS Estuary Reservoir River (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.009

Sources:

Source Unknown

Final 2008 Page 1917 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code D02E-01-BAC Assawoman Creek

Location: This cause encompasses the entirety of Assawoman Creek. This Creek is North of Assawoman Island and discharges to

Womans Bay.

City / County: Accomack Co.

Use(s): Recreation

Cause(s) /

VA Category: Enterococcus / 5A

The Recreation Use is impaired based on Enterococcus exceedances of the swimming criteria indicator at the lower segment (8 violates / 23 obs.) at Station 7-ASW003.36. The upper portion of Assawoman assess Recreation Use based on the extrapolated data from the downstream Station 7-ASW003.36.

Assawoman Creek

Recreation

Reservoir River
(Sq. Miles) (Acres) (Miles)

Enterococcus - Total Impaired Size by Water Type: 0.136

Sources:

Source Unknown

Final 2008 Page 1918 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code D02E-01-DO Assawoman Creek

Location: This cause encompasses the entirety of Assawoman Creek. This Creek is North of Assawoman Island and discharges to

Womans Bay.

City / County: Accomack Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5A

The Aquatic Life Use is impaired based on DO concentrations that exceed the criteria for this parameter with 5 violates/ 35 obs. At Station 7-ASW003.36. The upper portion of Assawoman Creek assessed using downstream monitoring at Station 7-

ASW003.36.

Assawoman Creek

Aquatic Life

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Oxygen, Dissolved - Total Impaired Size by Water Type: 0.136

Sources:

Source Unknown

Final 2008 Page 1919 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code **D02E-01-SF**

Assawoman Creek

Location: Described in VDH Notice and Description of Shellfish Direct Harvesting Condemnation #99-135A (effective 2004-12-30).

City / County: Accomack Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

The Shellfishing Use is not supporting with DSS shellfish harvesting condemnation # 099-135A (effective 2004-12-30).

Assawoman Creek

Shellfishing

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.136

Sources:

Source Unknown

Final 2008 Page 1920 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code **D02E-11-SF**

Little Cat Creek

Location: Described in VDH Notice and Description of Shellfish Direct Harvesting Condemnation# 099-135B (effective 2004-12-30).

City / County: Accomack Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

The Shellfishing Use is not supporting with DSS shellfish harvesting condemnation# 099-135B (effective 2004-12-30).

Little Cat Creek

Shellfishing

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.096

Sources:

Source Unknown

Final 2008 Page 1921 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code D02E-12-SF

Arbuckle Creek & South Portion of Womans Bay

Location: Described in VDH Notice and Description of Shellfish Direct Harvesting Condemnation# 099-135A (effective 2004-12-30).

City / County: Accomack Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

The Shellfishing Use is not supporting with DSS shellfish harvesting condemnation# 099-135A (effective 2004-12-30).

Arbuckle Creek & South Portion of Womans Bay

. Ifiching

Shellfishing

Estuary Reservoir (Sq. Miles) (Acres)

River (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.131

Sources:

Source Unknown

Final 2008 Page 1922 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code D02R-01-BAC Pettit Branch

Location: This cause encompasses the enirety of the Pettit Branch water. South shore tributary to Assawoman Creek. From headwaters to start of tidal waters.

City / County: Accomack Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

The Recreation Use is impaired based on the E.Coli exceedance of the swimming criteria indicator (17 violates / 29 obs.) at Station 7-PET000.80. TMDL due date same as original FC impairment

Pettit Branch

Estuary Reservoir River

(Sq. Miles) (Acres) (Miles)

Escherichia coli - Total Impaired Size by Water Type:

1.74

Sources:

Source Unknown

Final 2008 Page 1923 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code D02R-01-BEN Pettit Branch

Location: This cause encompasses the enirety of the Pettit Branch water. South shore tributary to Assawoman Creek. From headwaters to start of tidal waters.

City / County: Accomack Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

The Aquatic Life Use is impaired based on the stream's benthic population rating from the following sample events: Benthic IM [SI: S&F 01,06 S-02, 03; F-04, 05; VI: F- 03, & S-04].

Pettit Branch
Aquatic Life

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type: 1.74

Sources:

Source Unknown

Final 2008 Page 1924 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code D03E-01-DO Gargathy Creek

Location: This cause encompassess the entirety of the Gargathy Creek upper and lower portions.

City / County: Accomack Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5A

The Aquatic Life use is impaired based on concentrations that exceed the criteria for this parameter (4 violates / 31 obs.) at Station 7-GAR002.79 and 7-GAR001.80.

Gargathy Creek

Aquatic Life

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Oxygen, Dissolved - Total Impaired Size by Water Type: 0.130

Sources:

Natural Conditions - Water Quality Standards Use Attainability Analyses

Needed

Source Unknown

Final 2008 Page 1925 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code D03E-01-SF

Gargathy Creek

Location: Described in VDH Notice and Description of Shellfish Direct Harvesting Condemnation # 098-172A (effective 2005-06-15).

City / County: Accomack Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

The Shellfishing Use is not supporting with a portion of the DSS shellfish harvesting condemnation # 098-172A (effective 2005-

06-15).

Gargathy Creek
Shellfishing

Estuary (Sq. Miles)

0.130

Reservoir (Acres)

River (Miles)

Fecal Coliform - Total Impaired Size by Water Type:

Sources:

Source Unknown

Final 2008 Page 1926 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code **D03E-02-BAC** Finney Creek - Upper

Location: This cause encompasses the upper portion of Gargathy Creek. Tributary to Hummock Cove, station located near Locustville. Upper portion upstream of widening (approx, RM 2.38).

City / County: Accomack Co.

Use(s): Recreation

Cause(s) /

VA Category: Fecal Coliform / 5A

The Recreation Use is impaired based on Fecal Coliform data that is older than 5 years. Need Enteroccocci data.

Finney Creek - Upper Estuary Reservoir River (Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.002

Sources:

Source Unknown

Final 2008 Page 1927 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code **D03E-04-BAC** Folly Creek - Upper/ Middle

Location: This cause encompasses the upper and middle portions of Folly Creek. Tributary to Metompkin Bay. Upper estuarine portion of Folly Creek, from headwaters past Cross Creek and discharges into Metompkin Bay.

City / County: Accomack Co.

Use(s): Recreation

Cause(s) /

VA Category: Enterococcus / 5A

The Recreation Use is impaired based on Enterococcus concentrations that exceed the swimming criteria indicator (4 violates / 25 obs.) at Station 7-FLL002.46.

Folly Creek - Upper/ Middle

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Enterococcus - Total Impaired Size by Water Type: 0.376

Sources:

Source Unknown

Final 2008 Page 1928 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code D03E-04-DO

Folly Creek - Middle

Location: This cause encompasses the middle portion of Folly Creek. Tributary to Metompkin Bay. Middle estuarine portion of Folly

Creek.

City / County: Accomack Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5A

The Aquatic Life use is impaired based on dissolved oxygen concentrations that exceed the criteria for this parameter (3

violates / 28 obs.).

Folly Creek - Middle

Estuary (Sq. Miles)

Reservoir (Acres)

River (Miles)

Oxygen, Dissolved - Total Impaired Size by Water Type:

0.376

(IVIIICS)

Sources:

Aquatic Life

Source Unknown

Final 2008 Page 1929 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code **D03E-04-SF** Folly Creek - Upper/ Middle

Location: Described in VDH Notice and Description of Shellfish Direct Harvesting Condemnation # 097-173 (effective date 2006-03-

02).

City / County: Accomack Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

The Shellfishing Use is not supporting with DSS shellfish condemnation # 097-173 (effective date 2006-03-02).

Folly Creek - Upper/ Middle

Estuary Reservoir River

Shellfishing (Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.326

Sources:

Source Unknown

Final 2008 Page 1930 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code D03E-05-BAC Parker Creek -Middle/ Lower

Location: This cause encompasses the middle and lower portions of Parker Creek. Tributary to Metomkin Bay. Middle estuarine portion of creek, from confluence of North Fork (RM 1.3) downstream to end of DSS condemnation.

City / County: Accomack Co.

Use(s): Recreation

Cause(s) /

VA Category: Enterococcus / 5A

The Recreation Use is impaired based on Enterococcus concentrations that exceed the swimming criteria indicator (6 violates /

9 obs.)

Parker Creek -Middle/ Lower Estuary Reservoir River Recreation (Sq. Miles) (Acres) (Miles)

Enterococcus - Total Impaired Size by Water Type: 0.047

Sources:

Source Unknown

Final 2008 Page 1931 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code D03E-05-SF

Parker Creek - Lower

Location: Described in VDH Notice and Description of Shellfish Direct Harvesting Condemnation # 098-098A (effective 2005-06-15).

City / County: Accomack Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

The Shellfishing Use is not supporting with DSS shellfish condemnation # 098-098A (effective 2005-06-15).

Parker Creek - Lower

Shellfishing

Fecal Coliform - Total Impaired Size by Water Type: 0.029

Estuary

(Sq. Miles)

Reservoir

(Acres)

River

(Miles)

Sources:

Source Unknown

Final 2008 Page 1932 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code D03E-07-BAC Wachapreague Channel

Location: This cause encompasses a portion of Wachapreague Channel. Portion below Bunting Point Road to boat launch. Segment around area at Wachapreague Harbor.

City / County: Accomack Co.

Use(s): Recreation

Cause(s) /

VA Category: Enterococcus / 5A

The Recreational Use is impaired based on the Enterococci concentrations that exceed the swimming criteria indicator (2 violates/ 9 obs) at Station 7-WAS003.26.

Wachapreague Channel

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Recreation (Sq. Miles) (Acres)

Enterococcus - Total Impaired Size by Water Type: 0.032

Sources:

Source Unknown

Final 2008 Page 1933 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code D03E-07-SF Wachapreague Channel

Location: Described in VDH Notice and Description of Shellfish Direct Harvesting Condemnation # 097-219B (effective 2006-03-2).

City / County: Accomack Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

The Shellfishing Use is not supporting with DSS shellfish condemnation # 097-219B (effective 2006-03-2).

Wachapreague Channel Estuary Reservoir River
Shellfishing (Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.011

Sources:

Source Unknown

Final 2008 Page 1934 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code **D03E-08-DO** Northam Creek

Location: This cause encompasses a portion of Northam narrows between Hog Neck Creek and Mud Narrows, below Assawoman

Creek.

City / County: Accomack Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5A

The Aquatic Life use is impaired based on the dissolved oxygen concentrations that exceed the criteria for this parameter (3 violates / 3 obs.) at Station 7-NOT001.06.

Northam Creek Estuary Reservoir River (Sq. Miles) (Acres) (Miles)

Oxygen, Dissolved - Total Impaired Size by Water Type: 0.028

Sources:

Natural Conditions - Water Quality Standards Use Attainability Analyses Needed

Final 2008 Page 1935 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code D03R-01-BAC Parker Creek

Location: This cause encompasses the Riverine section of Parker Creek, from headwaters (at PERDUE plant - VA0003808) downstream to start of tidal waters (downstream of RM 2.9). Located northeast of Accomack.

City / County: Accomack Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

The Recreation Use is impaired based on Ecoli esceedance of the swimming criteria indicator (7-PAR003.09 - 8 violates / 16

obs.)

Parker Creek

Recreation

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Escherichia coli - Total Impaired Size by Water Type:

2.19

Sources:

Source Unknown

Final 2008 Page 1936 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code D03R-01-BEN Parker Creek

Location: This cause encompasses the Riverine section of Parker Creek, from headwaters (at PERDUE plant - VA0003808) downstream to start of tidal waters (downstream of RM 2.9). Located northeast of Accomack.

City / County: Accomack Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

The Aquatic Life Use is impaired based on the Benthic population impacts as recorded at the following sample events: 7-PAR004.35 - severely impaired [[VI:S-'00,F-'00,S-'01,F-'01,S-'02,MI:F-'02] & 7-PAR003.09 - moderately impaired [MI:F-'00,F-'01,S-'02,F-'02].

Parker Creek

Aquatic Life

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:

2.19

Sources:

Source Unknown

Final 2008 Page 1937 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code D03R-02-BAC Gargathy Creek

Location: This cause encompasses the Riverine portion of Gargathy Creek, from headwaters downstream to beginning of tidal waters. Located southeast of Nelsonia.

City / County: Accomack Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

The Recreation Use is impaired based on the Ecoli exceedance of the swimming criteria indicator(2 violates / 6 obs.) at Station 7.04 Page 91.

Gargathy Creek

Estuary Reservoir River

(Sq. Miles) (Acres) (Miles)

Escherichia coli - Total Impaired Size by Water Type:

2.69

Sources:

Source Unknown

Final 2008 Page 1938 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code D03R-02-BEN Gargathy Creek

Location: This cause encompasses the Riverine portion of Gargathy Creek, from headwaters downstream to beginning of tidal waters. Located southeast of Nelsonia.

City / County: Accomack Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

he Aquatic Life Use is impaired based on the impacts to the stream's benthic population. Benthic population impacts were recorded at the following sample events: 7-GAR006.01 - moderately impaired [MI:S-'00,F-'00,S-'02,F-'02].

Gargathy Creek

Estuary Reservoir River

Aquatic Life (Sq. Miles) (Acres) (Miles)

Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type: 2.69

Sources:

Source Unknown

Final 2008 Page 1939 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code **D03R-03-BEN** Ross Branch

Location: This cause encompasses the Riverine section of Ross Branch, segment begins at headwaters extending downstream to start of tidal waters. Located south of Accomack.Tributary to Folly Creek.

City / County: Accomack Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

The Aquatic Life Use is impaired based on the stream's benthic population. Benthic population impacts were recorded at the following sample events: 7-RSS001.40 - moderately impaired [MI: S&F- 02 & S-03,04; F-05; VI: F-04, S&F-06].

Ross Branch
Aquatic Life

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type: 3.07

Sources:

Source Unknown

Final 2008 Page 1940 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code D03R-04-BEN Unnamed tributary to Folly Creek

Location: This cause encompasses the headwaters downstream to start of tidal waters. Located east of Accomack, near Edge Hill

Cemetary.

City / County: Accomack Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

The Aquatic Life Use is imaired based on the streams Benthic population as recorded at the following sample events: 7-

XDE000.40 - moderately impaired [MI: F-02,05;S-06; VI: F-01;S-02; S&F-04].

Unnamed tributary to Folly Creek

Estuary (Sq. Miles) Reservoir (Acres)

River (Miles)

Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type:

1.46

Sources:

Aquatic Life

Leaking Underground Storage Tanks Source Unknown

Final 2008 Page 1941 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code D03R-04-DO

Unnamed tributary to Folly Creek

Location: This cause encompasses the headwaters downstream to start of tidal waters. Located east of Accomack, near Edge Hill

Cemetary.

City / County: Accomack Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5A

The Aquatic Life Use is impaired based on the DO concentrations that exceed the criteria for the parametner (2 violates / 7

obs.).

Aquatic Life

Unnamed tributary to Folly Creek

Estuary (Sq. Miles)

Reservoir (Acres)

River (Miles)

Oxygen, Dissolved - Total Impaired Size by Water Type:

1.46

Sources:

Source Unknown

Final 2008 Page 1942 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code D04E-01-BAC **Red Bank Creek - Middle**

Location: This cause encompasses the middle portion of Red Bank Creek that is within the end of Route 617 at Public Boat Landing.

Tributary to Hog Island Bay.

City / County: Northampton Co.

Use(s): Recreation

Cause(s) /

VA Category: Enterococcus / 5A

The Recreation Use is impaired based on Enterococci concentrations that exceed the swimming criteria indicator (3 violates/8

Red Bank Creek - Middle Estuary Reservoir River (Sq. Miles) (Acres) (Miles) Recreation

Enterococcus - Total Impaired Size by Water Type: 0.029

Sources:

Source Unknown

Final 2008 Page 1943 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code D04E-01-DO Red Bank Creek

Location: This cause encompasses all portions of Red Bank Creek. Tributary to Hog Island Bay.

City / County: Northampton Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5A

The Aquatic Life Use is impaired for DO based on exceedance of criteria. Upper and Lower segments of Creek are impaired for DO(2 violates / 5 obs.) at DEQ station @ 7-RBC002.06. Middle segment is impaired with 3 viol. / 8 obs.

Red Bank Creek

Aquatic Life

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Oxygen, Dissolved - Total Impaired Size by Water Type: 0.020

Sources:

Source Unknown

Final 2008 Page 1944 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code **D04E-01-SF**

Red Bank Creek

Location: Described in VDH Notice and Description of Shellfish Direct Harvesting Condemnation # 095-192A(effective 2005-9-21).

City / County: Northampton Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

The Shellfishing Use is not supporting with DSS shellfish condemnation # 095-192A(effective 2005-9-21).

Red Bank Creek

Shellfishing

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.018

Sources:

Source Unknown

Final 2008 Page 1945 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code D04E-02-DO

Unnamed tributary to Red Bank Creek.

Location: This cause encompasses a portion of an unnamed Tributary to Red Bank Creek. Southeast of Marionville, near Brick House Neck. Segment from first branching of creek (RM 0.3) downstream to confluence with Red Bank Creek. DSS shellfish direct harvesting condemnation # 095-192A (effective 2005-9-21).

City / County: Northampton Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5A

The Aquatic Life use is impaired based on dissolved oxygen concentrations exceeded the criteria for the parameter (2 violates / 5 obs.).

Unnamed tributary to Red Bank Creek.

Estuary (Sq. Miles)

0.006

Reservoir (Acres)

River (Miles)

Oxygen, Dissolved - Total Impaired Size by Water Type:

Sources:

Aquatic Life

Source Unknown

Final 2008 Page 1946 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code **D04E-02-SF** Unnamed tributary to Red Bank Creek.

Location: Described in VDH Notice and Description of Shellfish Direct Harvesting Condemnation # 095-192A (effective 2005-9-21).

City / County: Northampton Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

The Shellfishing Use is not supporting with DSS shellfish condemnation #095-192A (effective 2005-9-21).

Unnamed tributary to Red Bank Creek.

Shellfishing (Sq. Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.006

Estuary

Reservoir

(Acres)

River

(Miles)

Sources:

Source Unknown

Final 2008 Page 1947 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code **D04E-03-DO**

Quinby Harbor-Upshur Bay

Location: This cause encompasses a portion of Upshur Bay located around the area at mouth of Quinby Harbor.

City / County: Accomack Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5A

The Aquatic Life use is impaired based on dissolved oxygen concentrations exceed the criteria for the parameter (2 violates / 9

obs.).

Quinby Harbor-Upshur Bay

Aquatic Life

Estuary (Sq. Miles)

Reservoir (Acres)

River (Miles)

Oxygen, Dissolved - Total Impaired Size by Water Type:

0.058

Sources:

Source Unknown

Final 2008 Page 1948 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code **D04E-04-SF** Parting Creek - Upper

Location: Described in VDH Notice and Description of Shellfish Direct Harvesting Condemnation # 096-217 A (effective date 2006-10-

10)

City / County: Accomack Co. Northampton Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

The Shellfishing Use is not supporting with DSS shellfish condemnation # 096-217 A (effective date 2006-10-10)

Parting Creek - Upper Estuary Reservoir River
Shellfishing (Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.377

Sources:

Source Unknown

Final 2008 Page 1949 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code **D04E-05-BAC** Machipongo River

Location: This cause encompasses from the end of tidal waters downstream to 0.5 mi. south of Rt 182 crossing (minus area at mouth

of Greens Cr.).

City / County: Accomack Co. Northampton Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

The Recreation Use is impaired based on Ecoli concentration exceed the swimming criteria indicator at station 7-MAC008.55 (2

violates/ 15 obs).

Machipongo River

Estuary Reservoir River

(Sq. Miles) (Acres) (Miles)

Escherichia coli - Total Impaired Size by Water Type: 0.333

Sources:

Source Unknown

Final 2008 Page 1950 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code **D04E-05-SF** Machipongo River

Location: Described in VDH Notice and Description of Shellfish Direct Harvesting Condemnation #096-218A (effective date 2006-10-

10).

City / County: Accomack Co. Northampton Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

The Shellfishing Use is not supporting with DSS shellfish condemnation #096-218A (effective date 2006-10-10).

Machipongo River

Estuary Reservoir River

Shellfishing (Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.333

Sources:

Source Unknown

Final 2008 Page 1951 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code D04R-01-BAC Red Bank Creek

Location: This cause encompasses the area from headwaters downstream to end of tidal waters. Southeast of Marionville

City / County: Northampton Co.

Use(s): Recreation

Cause(s) /

VA Category: Fecal Coliform / 5A

The Recreation Use is impaired (2006 IR) due to exceedance of the instaneous criteria for fecal coliform at statiion 7-RBC003.87 (2 violates / 3 obs.)

Red Bank Creek

Recreation

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 1.27

Sources:

Source Unknown

Final 2008 Page 1952 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code D05E-01-BAC Oyster Slip (Harbor) - Upper

Location: This cause encompasses area adjacent to Brockenberry Bay within upper portion of the harbor. Located in the town of

Oyster, east of Cheriton.

City / County: Northampton Co.

Use(s): Recreation

Cause(s) /

VA Category: Enterococcus / 5A

The Recreation Use is impaired based on Enterococcus concentrations exceed the swimming criteria (2 violates / 12 obs.).

Oyster Slip (Harbor) - Upper

Recreation (Sq. Miles)

Enterococcus - Total Impaired Size by Water Type: 0.034

River

(Miles)

Reservoir

(Acres)

Estuary

Sources:

Source Unknown

Final 2008 Page 1953 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code D05E-01-SF Oyster Slip (Harbor) - Upper

Location: Described in VDH Notice and Description of Shellfish Direct Harvesting Condemnation # 094-12A (effective 2004-12-17).

City / County: Northampton Co.

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

The Shellfishing Use is not supporting with DSS shellfish condemnation # 094-12A (effective 2004-12-17).

Oyster Slip (Harbor) - Upper Estuary Reservoir River (Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.034

Sources:

Shellfishing

Source Unknown

Final 2008 Page 1954 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code D05R-01-BAC Taylor Creek

Location: This cause encompasses area from Penn Central RR crossing downstream to impoundment 0.1 mi. downstream of station.Located northeast of Simpkins.

City / County: Northampton Co.

Use(s): Recreation

Cause(s) /

VA Category: Fecal Coliform / 5A

The Recreation Use is impaired based on the Fecal Coliform exceedance of the swimming criteria (9 violates / 22 obs.).

No Ecoli data to assess Recreation Use.

Taylor Creek

Recreation

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 1.21

Sources:

Source Unknown

Final 2008 Page 1955 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code D05R-02-BAC Holt Creek

Location: This cause encompasses the area from headwaters downstream to start of tidal waters. Located east of Martins Siding.

City / County: Northampton Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

The Recreation Use impaired based on Ecoli concentrations exceeding the instantaneous swimming indicator criteria with 7 violates/ 24 obs.

Holt Creek

Recreation

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Escherichia coli - Total Impaired Size by Water Type:

1.91

Sources:

Source Unknown

Final 2008 Page 1956 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code D05R-03-BAC Holt Creek Unnamed Tributary

Location: This cause encompassess the area from Penn Central RR crossing near headwaters downstream to confluence with Holt Creek. Located east of Martins Siding.

City / County: Northampton Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A Fecal Coliform / 5A

The Recreation Use is impaired based on the Fecal Coliform exceedance of the swimming criteria (3 violates / 6 obs.) and Ecoli (2 violates / 3 obs.).

Holt Creek Unnamed Tributary Recreation	Estuary Reservoir (Sq. Miles) (Acres)	River (Miles)
Escherichia co	Escherichia coli - Total Impaired Size by Water Type:	
Holt Creek Unnamed Tributary	Estuary Reservoir	River
Recreation	(Sq. Miles) (Acres)	(Miles)
Fecal Colifor	m - Total Impaired Size by Water Type:	1.38

Sources:

Source Unknown

Final 2008 Page 1957 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code **D06E-01-DO** Magothy Bay

Location: This cause encompasses the area at the end of Rt. 665, Cushmans Landing.

City / County: Northampton Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5A

The Aquatic Life use is impaired based on the DO concentration exceed the criteria for the parameter (4 violates / 21 obs.).

Magothy Bay Estuary Reservoir River Aquatic Life (Sq. Miles) (Acres) (Miles)

Oxygen, Dissolved - Total Impaired Size by Water Type: 0.031

Sources:

Source Unknown

Final 2008 Page 1958 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code D06R-01-BAC Mill Creek

Location: This cause encompasses the area at the start of Mill Creek upstream of Penn central RR crossing and ends downstream of Rt 600 at the beginning of the impoundment upstream of tidal waters. Located north of Capeville.

City / County: Northampton Co.

Use(s): Recreation

Cause(s) /

VA Category: Fecal Coliform / 5A

The Recreation Use is impaired based on the Fecal Coliform exceedance of the swimming criteria (2 violates / 17 obs.).

Mill Creek

Recreation

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type:

1.55

Sources:

Source Unknown

Final 2008 Page 1959 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code **D06R-01-DO** Mill Creek

Location: This cause encompasses the area at the start of Mill Creek upstream of Penn central RR crossing and ends downstream of Rt 600 at the beginning of the impoundment upstream of tidal waters. Located north of Capeville.

City / County: Northampton Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5A

The Aquatic Life use is impaired based on the dissolved oxygen concentrations exceed the criteria for this parameter (5 violates / 9 obs.).

Mill Creek

Aquatic Life

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Oxygen, Dissolved - Total Impaired Size by Water Type:

1.55

Sources:

Source Unknown

Final 2008 Page 1960 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code D06R-01-PH Mill Creek

Location: This cause encompasses the area at the start of Mill Creek upstream of Penn central RR crossing and ends downstream of Rt 600 at the beginning of the impoundment upstream of tidal waters. Located north of Capeville.

City / County: Northampton Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: pH / 5A

The Aquatic Life use is impaired based on pH concentrations exceed the criteria for this parameter (4violates / 9 obs.).

Mill Creek

Aquatic Life

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

pH - Total Impaired Size by Water Type:

1.55

Sources:

Source Unknown

Final 2008 Page 1961 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code **D06R-02-BAC** Narrow Channel Branch

Location: This cause encompasses the area from headwaters downstream to start of tidal waters. Located east of Bayview.

City / County: Northampton Co.

Use(s): Recreation

Cause(s) /

VA Category: Fecal Coliform / 5A

The Recreation Use is impaired based on the Fecal Coliform exceedance of the swimming criteria (2 violates / 2 obs.) Need additional data, minimal observations (2) on which to base assessment.

Narrow Channel BranchEstuaryReservoirRiverRecreation(Sq. Miles)(Acres)(Miles)

Fecal Coliform - Total Impaired Size by Water Type: 1.33

Sources:

Source Unknown

Final 2008 Page 1962 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code **D06R-02-BEN** Narrow Channel Branch

Location: This cause encompasses the area from headwaters downstream to start of tidal waters. Located east of Bayview.

City / County: Northampton Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Benthic-Macroinvertebrate Bioassessments / 5A

The Aquatic Life Use is impaired based on the impacts to the stream's benthic population. DEQ (Bio) monitoring determines impairment by benthic assessment ratings of SI (spring 2001) & MI (fall 2001).

Narrow Channel Branch

Aquatic Life

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Benthic-Macroinvertebrate Bioassessments - Total Impaired Size by Water Type: 1.33

Sources:

Source Unknown

Final 2008 Page 1963 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code **D06R-03-BAC** Tommy's Ditch

Location: This cause encompasses the entirety of Tommy's Ditch West of Kiptopeke State Park.

City / County: Northampton Co.

Use(s): Recreation

Cause(s) /

VA Category: Escherichia coli / 5A

The Recreation Use is impaired based on the Ecoli exceedance of the swimming criteria with 4violates / 8 obs.

Tommy's Ditch

Recreation

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Escherichia coli - Total Impaired Size by Water Type:

2.29

Sources:

Source Unknown

Final 2008 Page 1964 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code **D06R-03-DO** Tommy's Ditch

Location: This cause encompasses the entirety of Tommy's Ditch West of Kiptopeke State Park.

City / County: Northampton Co.

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5A

The Aquatic Life Use is impaired based on the Dissolved Oxygen concentrations exceed the criteria for this parameter (2violates / 8 obs).

Tommy's Ditch

Aquatic Life

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Oxygen, Dissolved - Total Impaired Size by Water Type: 2.29

Sources:

Source Unknown

Final 2008 Page 1965 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code **D07E-02-BAC** Lake Rudee - Upper

Location: This cause encompasses the upper portion of Lake Rudee, from end of Owl Creek downstream to approx. RM 0.4 (upstream of confluence of Lake Holly with Rudee Inlet canal).

of confidence of Lake Florily with Rudge filler carrain

City / County: Virginia Beach City

Use(s): Recreation

Cause(s) /

VA Category: Enterococcus / 5A

The Recreation Use impaired based on the Enterococcus exceedances of the swimming criteria indicator (3violates / 26 obs.)

Lake Rudee - Upper Estuary Reservoir River (Sq. Miles) (Acres) (Miles)

Enterococcus - Total Impaired Size by Water Type: 0.089

Sources:

Source Unknown

Final 2008 Page 1966 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code **D07E-02-SF** Lake Rudee - Upper

Location: Described in VDH Notice and Description of Shellfish Direct Harvesting Condemnation # 073-074A (effective 2006-08-29).

City / County: Virginia Beach City

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

The Shellfishing Use is not supporting with DSS shellfish condemnation #073-074A (effective 2006-08-29)

Lake Rudee - Upper Estuary Reservoir River
Shellfishing (Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.089

Sources:

Source Unknown

Final 2008 Page 1967 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code D07E-04-BAC Owl Creek - Upper/ Lower

Location: Headwaters tributary to Lake Rudee, located west of Lake Christine.

City / County: Virginia Beach City

Use(s): Recreation

Cause(s) /

VA Category: Enterococcus / 5A

Recreation Use impaired for Enterrococci at Lower segment (exceedance 4 viol / 25 obs) Upper segment (10 viol/ 26 obs)...

Owl Creek - Upper/ Lower Estuary Reservoir River
Recreation (Sq. Miles) (Acres) (Miles)

Enterococcus - Total Impaired Size by Water Type: 0.022

Sources:

Source Unknown

Final 2008 Page 1968 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code **D07E-04-DO** Owl Creek- Upper

Location: This cause encompasses the Headwaters of Owl Creek to tributary to Lake Rudee, located west of Lake Christine.

City / County: Virginia Beach City

Use(s): Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5A

The Aquatic Life use is impaired based on the dissolved oxygen concentrations exceed the criteria for this parameter at Upper segemnt (6 violates / 38 obs.) and Lower segment (8 viol. / 43 obs).

Owl Creek- Upper Estuary Reservoir River Aquatic Life (Sq. Miles) (Acres) (Miles)

Oxygen, Dissolved - Total Impaired Size by Water Type: 0.022

Sources:

Source Unknown

Final 2008 Page 1969 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code **D07E-04-SF**

Owl Creek - Lower

Location: Described in VDH Notice and Description of Shellfish Direct Harvesting Condemnation # 073-074A (effective 2006-08-29).

City / County: Virginia Beach City

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

The Shellfishing Use is not supporting with DSS shellfish condemnation # 073-074A (effective 2006-08-29).

Owl Creek - Lower

Shellfishing

Estuary (Sq. Miles)

Reservoir (Acres)

River

Fecal Coliform - Total Impaired Size by Water Type:

0.022

(Miles)

Sources:

Source Unknown

Final 2008 Page 1970 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code **D07E-10-SF** Lake Rudee and Lake Wesley

Location: Described in VDH Notice and Description of Shellfish Direct Harvesting Condemnation # 073-074 (effective 2006-08-29).

City / County: Virginia Beach City

Use(s): Shellfishing

Cause(s) /

VA Category: Fecal Coliform / 5B

The Shellfishing Use is not supporting with DSS shellfish condemnation # 073-074 (effective 2006-08-29).

Lake Rudee and Lake Wesley Estuary Reservoir

Shellfishing (Sq. Miles) (Acres) (Miles)

Fecal Coliform - Total Impaired Size by Water Type: 0.060

River

Sources:

Source Unknown

Final 2008 Page 1971 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code LYNPH-DO-BAY

Lynnhaven River and Broad Bay System CBP segment LYNPH and **Tributaries**

Reservoir

River

Location: This cause encompasses the entirety of the Lynnhaven River CBP segment LYNPH and Tributaries. Tributary to south

shore of Chesapeake Bay. CBP segment LYNPH.

City / County: Virginia Beach City

Use(s): Aquatic Life Open-Water Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5A

The Open-Water Aquatic Life Use is impaired based on failure to meet the dissolved oxygen criteria for Open Water - ROY &

Summer.

Lynnhaven River and Broad Bay System CBP segment LYNPH and Tributaries Estuary Reservoir River (Sq. Miles) (Acres) (Miles) **Aquatic Life**

> Oxygen, Dissolved - Total Impaired Size by Water Type: 7.881

Lynnhaven River and Broad Bay System CBP segment LYNPH and Tributaries

Estuary (Sq. Miles) (Acres) (Miles) **Open-Water Aquatic Life**

> Oxygen, Dissolved - Total Impaired Size by Water Type: 7.881

Sources:

Agriculture Atmospheric Deposition -Industrial Point Source Internal Nutrient Recycling

Discharge Nitrogen

Loss of Riparian Habitat Municipal Point Source Sources Outside State Wet Weather Discharges Discharges Jurisdiction or Borders (Non-Point Source)

Wet Weather Discharges (Point Source and

Combination of Stormwater,

SSO or CSO)

Final 2008 Page 1972 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code LYNPH-SAV-BAY Lynnhaven River and Broad Bay System CBP segment LYNPH

Location: This cause encompasses the entirety of the Lynnhaven River CBP segment LYNPH and Tributaries. CBP segment LYNPH.

City / County: Accomack Co. Norfolk City Virginia Beach City

Use(s): Aquatic Life Shallow-Water Submerged

Aquatic Vegetation

Cause(s) /

VA Category: Aquatic Plants (Macrophytes) / 5A

The Shallow-Water Submerged Aquatic Vegetation Use is impaired based on failure to meet the SAV acreage criteria.

River

(Miles)

River

(Miles)

Estuary

(Sq. Miles)

(Clean Sediment)

Reservoir

(Acres)

Lynnhaven River and Broad Bay System CBP segment LYNPH **Estuary** Reservoir (Sq. Miles) (Acres) **Aquatic Life**

Aquatic Plants (Macrophytes) - Total Impaired Size by Water Type: 10.449

Lynnhaven River and Broad Bay System CBP segment LYNPH

Shallow-Water Submerged Aquatic Vegetation

Aquatic Plants (Macrophytes) - Total Impaired Size by Water Type: 10.706

Sources:

Agriculture Atmospheric Deposition -Clean Sediments Industrial Point Source Discharge

Nitrogen

Internal Nutrient Recycling Loss of Riparian Habitat Municipal Point Source Sediment Resuspension

Discharges

Sources Outside State Wet Weather Discharges Wet Weather Discharges Jurisdiction or Borders (Non-Point Source) (Point Source and

Combination of Stormwater,

SSO or CSO)

Final 2008 Page 1973 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code MOBPH-DO-BAY Chesapeake Bay segment MOBPH (Mobjack Bay)

Location: This cause encompasses the complete CBP segment MOBPH.

City / County: Accomack Co. Gloucester Co. Hampton City Mathews Co. Poquoson City City

York Co.

Use(s): Aquatic Life Open-Water Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5A

The 30-day dissolved oxygen criteria for open water use failed for the 2008 assessment. There is insufficient data to assess

remaining shorter dissolved oxygen criteria for this use.

Chesapeake Bay segment MOBPH (Mobjack Bay)

Aquatic Life

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Oxygen, Dissolved - Total Impaired Size by Water Type: 413.739

Chesapeake Bay segment MOBPH (Mobjack Bay)

Estuary Reservoir River
(Sq. Miles) (Acres) (Miles)

Open-Water Aquatic Life
Oxygen, Dissolved - Total Impaired Size by Water Type: 413.739

Sources:

Agriculture Atmospheric Deposition - Industrial Point Source Internal Nutrient Recycling

Nitrogen Discharge

Loss of Riparian Habitat Municipal Point Source Sources Outside State Wet Weather Discharges Jurisdiction or Borders (Non-Point Source)

Wet Weather Discharges (Point Source and Combination of Stormwater,

SSO or CSO)

Final 2008 Page 1974 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code MOBPH-SAV-BAY Chesapeake Bay segment MOBPH (Mobjack Bay)

Location: This cause encompasses the complete CBP segment MOBPH.

City / County: Gloucester Co. Hampton City Mathews Co. Poquoson City City York Co.

Use(s): Aquatic Life Shallow-Water Submerged

Aquatic Vegetation

Cause(s) /

VA Category: Aquatic Plants (Macrophytes) / 5A

The acres of submerged aquatic vegetation (SAV) mapped through aerial surveys does not meet the criteria. There is

insufficient data to assess the water clarity criteria.

Chesapeake Bay segment MOBPH (Mobjack Bay)

Chesapeake Bay segment MOBPH (Mobjack Bay)

Estuary River Reservoir (Sq. Miles) (Acres) (Miles) **Aquatic Life**

Aquatic Plants (Macrophytes) - Total Impaired Size by Water Type: 411.909

(Sq. Miles) **Shallow-Water Submerged Aquatic Vegetation**

Aguatic Plants (Macrophytes) - Total Impaired Size by Water Type: 411.909

Sources:

Agriculture Atmospheric Deposition -

Nitrogen

Internal Nutrient Recycling Loss of Riparian Habitat

Sources Outside State Wet Weather Discharges Jurisdiction or Borders (Non-Point Source)

Clean Sediments

Municipal Point Source

Discharges

Wet Weather Discharges (Point Source and

Combination of Stormwater,

Estuary

Discharge

Reservoir

(Acres)

Industrial Point Source

Sediment Resuspension

(Clean Sediment)

River

(Miles)

SSO or CSO)

Final 2008 Page 1975 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code PIAMH-DO-BAY Piankatank Mesohaline Estuary

Location: The Piankatank Mesohaline estuary.

City / County: Gloucester Co. Mathews Co. Middlesex Co.

Use(s): Aquatic Life Open-Water Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5A

In 2002, the tidal mainstem of Dragon Swamp/Piankatank River was listed for dissolved oxygen (DO); the impairment was considered to be due to natural conditions of upstream swamps and stratification. The new Chesapeake Bay criteria were implemented during the 2006 cycle. The segment met the Open Water 30 Day dissolved oxygen criteria, however there was insufficient data to assess the other criteria; therefore this segment remained listed for the DO impairment. The TMDL was due in 2014.

However, during the 2008 cycle the mesohaline Piankatank estuary failed the 30-day Open Water summer dissolved oxygen criteria. Because this segment fails as part of the Bay criteria, the TMDL will be due in 2010. The segment passed the Open Water 30-day rest-of-year standard and there was insufficient data to assess the other dissolved oxygen criteria.

Piankatank Mesohaline Estuary Aquatic Life			Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
	Oxygen, Dissolved - To	24.612			
Piankatank Mesohaline Estuary Open-Water Aquatic Life			Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
	Oxygen, Dissolved - Total Impaired Size by Water Type:		26.055		
Sources:					
Agriculture	Atmospheric Deposition - Nitrogen	Changes in Ordinary Stratification and Bottom Water Hypoxia/Anoxia	Industrial Point Source Discharge		
Internal Nutrient Recycling	Loss of Riparian Habitat	Municipal Point Source Discharges	Sources Outside State Jurisdiction or Borders		
Wet Weather Discharges (Point Source and Combination of Stormwater, SSO or CSO)					

Final 2008 Page 1976 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code PIAMH-SAV-BAY **Piankatank Mesohaline Estuary**

Location: The Piankatank Mesohaline estuary.

City / County: Gloucester Co. Mathews Co. Middlesex Co.

Use(s): Aquatic Life Shallow-Water Submerged

Aquatic Vegetation

Cause(s) /

VA Category: Aquatic Plants (Macrophytes) / 5A

During the 2006 cycle, the Chesapeake Bay Water Quality Standards were adopted. In the 2008 cycle, the Piankatank Mesohaline segment (PIAMH) failed both the Submerged Aquatic Vegetation acreage criteria and the Water Clarity Acreage criteria.

Piankatank Mesohaline Estuary Estuary Reservoir River (Sq. Miles) (Acres) (Miles) **Aquatic Life** Aquatic Plants (Macrophytes) - Total Impaired Size by Water Type: 26.055

Piankatank Mesohaline Estuary **Estuary** Reservoir River (Sq. Miles) (Miles) (Acres) **Shallow-Water Submerged Aquatic Vegetation**

> Aquatic Plants (Macrophytes) - Total Impaired Size by Water Type: 26.055

Sources:

Agriculture Atmospheric Deposition -Clean Sediments Industrial Point Source

Nitrogen Discharge

Internal Nutrient Recycling Loss of Riparian Habitat Municipal Point Source Sediment Resuspension

Discharges (Clean Sediment)

Sources Outside State Wet Weather Discharges Jurisdiction or Borders (Point Source and

Combination of Stormwater,

SSO or CSO)

Final 2008 Page 1977 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code POCMH-SAV-BAY Chesapeake Bay segment POCMH (Pocomoke Sound)

Location: This cause encompasses the complete CBP segment POCMH.

City / County: Accomack Co.

Use(s): Aquatic Life Shallow-Water Submerged

Aquatic Vegetation

Cause(s) /

VA Category: Aquatic Plants (Macrophytes) / 5A

The acres of submerged aquatic vegetation (SAV) mapped through aerial surveys does not meet the criteria. There is

insufficient data to assess the water clarity criteria.

Chesapeake Bay segment POCMH (Pocomoke Sound)

Estuary River Reservoir (Sq. Miles) (Acres) (Miles) **Aquatic Life**

> Aquatic Plants (Macrophytes) - Total Impaired Size by Water Type: 55.406

Chesapeake Bay segment POCMH (Pocomoke Sound)

Shallow-Water Submerged Aquatic Vegetation

Aquatic Plants (Macrophytes) - Total Impaired Size by Water Type: 55.149

Sources:

Agriculture Atmospheric Deposition -Clean Sediments Industrial Point Source

Nitrogen

Municipal Point Source Internal Nutrient Recycling Loss of Riparian Habitat

Discharges

Sources Outside State Wet Weather Discharges Wet Weather Discharges Jurisdiction or Borders (Non-Point Source) (Point Source and

Combination of Stormwater,

SSO or CSO)

Discharge

Estuary

(Sq. Miles)

Sediment Resuspension

Reservoir

(Acres)

River

(Miles)

(Clean Sediment)

Final 2008 Page 1978 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code POCOH-DO-BAY Pocomoke River System CBP segment POCOH (Pocomoke River)

Location: This cause encompasses the entirety of the Pocomoke River System CBP segment POCOH. Virginia portion of CBP

segment POCOH.

City / County: Accomack Co.

Use(s): Aquatic Life Open-Water Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5A

The Open-Water Aquatic Life Use is impaired based on failure to meet the dissolved oxygen criteria for Open Water - Summer. There are insufficient data to determine use support for the Open Water - Record of Year (ROY) dissolved oxygen use.

Previous (2006 IR) Use Flag ID = CB-POCOH.

Pocomoke River System CBP segment POCOH (Pocomoke River) Estuary Reservoir River (Sq. Miles) (Acres) (Miles) **Aquatic Life**

> Oxygen, Dissolved - Total Impaired Size by Water Type: 0.428

Pocomoke River System CBP segment POCOH (Pocomoke River) **Estuary**

Reservoir River (Sq. Miles) (Acres) (Miles) **Open-Water Aquatic Life**

> Oxygen, Dissolved - Total Impaired Size by Water Type: 0.428

Sources:

Agriculture Atmospheric Deposition -Industrial Point Source Internal Nutrient Recycling

Discharge Nitrogen

Municipal Point Source Loss of Riparian Habitat Sources Outside State Wet Weather Discharges

Discharges Jurisdiction or Borders (Non-Point Source)

Wet Weather Discharges (Point Source and Combination of Stormwater, SSO or CSO)

Final 2008 Page 1979 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code TANMH-DO-BAY Chesapeake Bay segment TANMH (Tangier Sound)

Location: This cause encompasses the complete CBP segment TANMH.

City / County: Accomack Co.

Use(s): Aquatic Life Open-Water Aquatic Life

Cause(s) /

VA Category: Oxygen, Dissolved / 5A

The 30-day dissolved oxygen criteria for open water use failed for the 2008 assessment. There is insufficient data to assess remaining shorter dissolved oxygen criteria for this use.

Chesapeake Bay segment TAI Aquatic Life	/IH (Tangier Sound)		Estuary (Sq. Miles)	Reservoir (Acres)	River (Miles)
	Oxygen, Dissolved - Tot	122.541			
Chesapeake Bay segment TAI	NMH (Tangier Sound)		Estuary	Reservoir	River
Open-Water Aquatic Life			(Sq. Miles)	(Acres)	(Miles)
	Oxygen, Dissolved - Total Impaired Size by Water Type:		122.541		
Sources:					
Agriculture	Atmospheric Deposition - Nitrogen	Industrial Point Source Discharge	Internal Nutrient Recycling		
Loss of Riparian Habitat	Municipal Point Source Discharges	Sources Outside State Jurisdiction or Borders	Wet Weather Discharges (Point Source and Combination of Stormwater,		

SSO or CSO)

Final 2008 Page 1980 of 2208

Chesapeake Bay/Atlantic/Small Coastal Basins

Cause Group Code TANMH-SAV-BAY Chesapeake Bay segment TANMH (Tangier Sound)

Location: This cause encompasses the complete CBP segment TANMH.

City / County: Accomack Co.

Use(s): Aquatic Life Shallow-Water Submerged

Aquatic Vegetation

Cause(s) /

Aquatic Life

VA Category: Aquatic Plants (Macrophytes) / 5A

The acres of submerged aquatic vegetation (SAV) mapped through aerial surveys does not meet the criteria. There is

insufficient data to assess the water clarity criteria.

Chesapeake Bay segment TANMH (Tangier Sound)

(Sq. Miles) (Acres)

Estuary

Estuary

(Sq. Miles)

Discharge

River

(Miles)

River

(Miles)

Reservoir

Reservoir

(Acres)

Industrial Point Source

(Clean Sediment)

Aquatic Plants (Macrophytes) - Total Impaired Size by Water Type: 122.541

Chesapeake Bay segment TANMH (Tangier Sound)

Shallow-Water Submerged Aquatic Vegetation

Aquatic Plants (Macrophytes) - Total Impaired Size by Water Type: 122.541

Sources:

Agriculture Atmospheric Deposition -Clean Sediments

Nitrogen

Municipal Point Source Sediment Resuspension

Internal Nutrient Recycling Loss of Riparian Habitat Discharges

Sources Outside State Wet Weather Discharges Jurisdiction or Borders (Point Source and

Combination of Stormwater,

SSO or CSO)

Final 2008 Page 1981 of 2208